SUPPORTING DOCUMENTATION

QUESTION 8

QUANT REPORT

Operator ID: DD9617 Quant Rev: 6 Quant Time: 931202 20:32
Output File: ^B9141::QT Injected at: 931202 19:51
Data File: >B9141::B1 Dilution Factor: 1.00000
Name: INST 59952, VSTD050
Misc: VSTD050, QV2718, S,5,5,6'X2mm 1% SP1000 ON CBPKB

ID File: IDVOB::SC
Title: Daily Calibration via Single Point at 50 ug/L Rev. E
Last Calibration: 931202 11:51

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.60	128.0	29628	50.00	UG/L	82
2)	Chloromethane	2.03	50.0	38989	54.29	UG/L	93
3)	Bromomethane	2.88	94.0	12415M	49.76	UG/L	87
4)	Vinyl Chloride	3.58	62.0	12799M	51.11	UG/L	97
5)	Chloroethane	4.78	64.0	23198	59.54	UG/L	91
6)	Methylene Chloride	7.15	84.0	50268	48.85	UG/L	90
7)	Acetone	8.12	43.0	19380	57.22	UG/L	68
8)	Carbon Disulfide	8.78	76.0	121908	52.02	UG/L	100
9)	Trichlorofluoromethane	9.40	101.0	116632	51.62	UG/L	100
10)	1,1-Dichloroethene	10.14	96.0	36064	50.89	UG/L	89
11)	1,1-Dichloroethane	11.46	63.0	88574	56.69	UG/L	98
12)	1,2-Dichloroethene (total)	12.23	96.0	40586	51.11	UG/L	84
13)	Chloroform	12.78	83.0	113038	54.53	UG/L	91
14)	1,2-Dichloroethane-d4	13.44	65.0	97619	61.10	UG/L	78
15)	1,2-Dichloroethane	13.55	62.0	106568	60.12	UG/L	98
16)	2-Butanone	13.47	43.0	22938	63.17	UG/L	94
17)	*1,4-Difluorobenzene	21.04	114.0	135384	50.00	UG/L	89
18)	1,1,1-Trichloroethane	14.79	97.0	108451	53.50	UG/L	71
19)	Carbon Tetrachloride	14.79	117.0	13101	7.12	UG/L	86
19)	Carbon Tetrachloride	15.22	117.0	94739	51.48	UG/L	87
20)	Vinyl Acetate	15.45	43.0	79419	57.66	UG/L	71
21)	Bromodichloromethane	15.73	83.0	102792	54.75	UG/L	92
22)	1,2-Dichloropropane	17.12	63.0	49070	53.51	UG/L	95
23)	cis-1,3-Dichloropropene	17.36	75.0	90643	54.17	UG/L	97
24)	Trichloroethene	17.98	130.0	58610	49.03	UG/L	93
25)	Dibromochloromethane	18.48	129.0	83030	54.34	UG/L	96
26)	1,1,2-Trichloroethane	18.60	97.0	44477	54.70	UG/L	98
27)	Benzene	18.52	78.0	143909	54.57	UG/L	85
28)	trans-1,3-Dichloropropene	18.64	75.0	92502	57.07	UG/L	97
29)	2-Chloroethylvinylether	19.72	63.0	30917	54.95	UG/L	66
30)	Bromoform	21.08	173.0	69739	53.27	UG/L	98
31)	*Chlorobenzene-d5	25.78	117.0	114814	50.00	UG/L	95
32)	4-Methyl-2-Pentanone	21.66	43.0	55674	57.67	UG/L	92
33)	2-Hexanone	23.22	43.0	45037	59.72	UG/L	100
34)	Tetrachloroethene	23.53	164.0	48166	47.78	UG/L	96
35)	1,1,2,2-Tetrachloroethane	23.37	83.0	56009	56.85	UG/L	94
36)	Toluene-d8	24.61	98.0	148652	53.00	UG/L	97
37)	Toluene	24.81	92.0	92627	54.78	UG/L	90
38)	Chlorobenzene	25.89	112.0	111240	52.24	UG/L	87
39)	Ethylbenzene	27.69	106.0	64145	57.34	UG/L	99
40)	Styrene	31.07	104.0	122160	54.36	UG/L	66
41)	Xylene (total)	31.34	106.0	75885^	55.98	UG/L	89
41)	Xylene (total)	32.16	106.0	157575	116.24	UG/L	87

Compound	R.T.	Q ion	Area	Conc	Units
42) Bromofluorobenzene	29.83	95.0	94439	52.65	UG/L

* Compound is ISTD

QV2718

Blank > B917

178795

178794

178793

178792

Continuing Calibration Check
VOC Compounds

Case No: | Calibration Date: 12/05/93

Contractor: [illegible] | Time: 17:39

Contract No: | Laboratory ID: 56172

Instrument ID: 28 | Initial Calibration Date: 11/26/93 11/30/93

Minimum RF for SPCC is .30 | Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Chloromethane	1.27775	1.21053	5.26		**
Bromomethane	.33551	.30812	8.16		
Vinyl Chloride	.35309	.33302	5.68	*	
Chloroethane	.61777	.58371	5.50		
Methylene Chloride	1.49313	1.83354	12.75		
Acetone	.47227	.57222	21.16		
Carbon Disulfide	3.84606	3.70776	1.65		
Trichlorofluoromethane	3.65027	3.58993	1.65		
1,1-Dichloroethene	1.16255	1.15192	.91	*	
1,1-Dichloroethane	2.63703	2.58124	2.12		**
1,2-Dichloroethane (total)	1.28074	1.28012	.05		
Chloroform	3.29716	3.37393	2.33	*	
1,2-Dichloroethane	3.14251	2.95263	6.04		
1,2-Dichloroethane-d4	2.90131	2.67477	7.81		(Conc=50.00)
2-Butanone	.66950	.68563	2.44		
1,1,1-Trichloroethane	.87851	.75078	5.07		
Carbon Tetrachloride	.83160	.80744	4.06		
Vinyl Acetate	.55722	.51462	7.84		
Bromodichloromethane	.73469	.70029	4.67		
1,2-Dichloropropane	.36352	.35310	2.81	*	
trans-1,3-Dichloropropene	.60738	.61036	.49		
Trichloroethene	.45094	.42927	6.46		
Dibromochloromethane	.59702	.54364	8.91		
1,1,2-Trichloroethane	.31869	.31745	.46		
Benzene	.98614	.97740	.89		
cis-1,3-Dichloropropene	.62755	.62086	1.03		
2-Chloroethylvinylether	.21577	.21724	.68		
Bromoform	.53609	.44984	16.09		**
4-Methyl-2-Pentanone	.47751	.50210	5.15		
2-Hexanone	.37139	.36059	2.48		
Tetrachloroethene	.41736	.41698	.39		
1,1,2,2-Tetrachloroethane	.46094	.48816	5.90		**

>B90056 - 19:38

>B90057 - 20:26

>B90058 - 21:15

>B90059 - 22:03

>B90060 - 22:52

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

8428910352

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 11/26/93

Contractor: ICF Inc

Time: 17:59

Contract No:

Laboratory ID: V87172

Instrument ID: 22

Initial Calibration Date: 11/24/93 [handwritten correction with initials]

Minimum $\overline{RF}$ for SPCC is .30   Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene-d8	1.25557	1.24834	1.55			(Conc=50.00)
Toluene	.76149	.7598.	.22	*		
Chlorobenzene	[illegible]	.95262	5.70		**	
Ethylbenzene	.48572	.47994	1.59	*		
Styrene	1.03799	1.01239	2.07			
Xylene (total)	.69250	.61401	1.36			(Conc=100.00)
Bromofluorobenzene	.81713	.78099	4.45			(Conc=50.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*)   SPCC - System Performance Check Compounds (**)

QV2718
Blank > B9
178795
178794
178793
178792

Title: [illegible] FOR EXTRA VOA COMPOUNDS
Generated: 951206 23:24

Check Standard Data File: [illegible]
Injection Time: 951205 17:39

Compound	$\overline{RF}$	RF	%Diff	Calib Meth	
Dichlorodifluoromethane	.53759	.57741	1.95	Average	(Conc=100.00)
Acrolein	.10417	.07424	29.73	Average	(Conc=250.00)
Acrylonitrile	.34516	.35409	2.64	Average	(Conc=250.00)
t-Butyl methyl ether	4.43363	4.18499	5.61	Average	
t-Butyl alcohol	.18052	.17155	5.05	Average	(Conc=125.00)
Diisopropyl ether	1.30640	1.21402	7.07	Average	(Conc=125.00)
Ethylene dibromide	.42179	.41637	1.29	Average	(Conc=125.00)
1,4-Dioxane	.00297	.00283	4.80	Average	(Conc=2500.00)
m-Dichlorobenzene	1.04493	.99024	5.23	Average	
o-Dichlorobenzene	.93359	.97525	4.25	Average	
p-Dichlorobenzene	1.0[illegible]	.92719	4.26	Average	

\>B9056 - 19:38
\>B9057 - 20:26
\>B9058 - 21:15
\>B9059 - 22:03
\>B9060 - 22:52

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

Page 1 of 1

8428910354

QUANT REPORT

Operator ID: KS9934 Quant Rev: 6 Quant Time: 931205 18:20
Output File: ^B9172::QT Injected at: 931205 17:39
Data File: >B9172::B1 Dilution Factor: 1.00000
Name: INST 59952, VSTD050
Misc: VSTD050, QV2718, L,5,5,6'X2mm 1% SP1000 ON CBPKB

ID File: IDVOB::SC
Title: Daily Calibration via Single Point at 50 ug/L Rev. E
Last Calibration: 931203 11:42

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	10.62	128.0	36460	50.00	UG/L	8
2)	Chloromethane	2.05	50.0	44136	52.20	UG/L	9
3)	Bromomethane	2.90	94.0	11234M	41.55	UG/L	9
4)	Vinyl Chloride	3.56	62.0	12142M	42.12	UG/L	9
5)	Chloroethane	4.80	64.0	21355	45.25	UG/L	9
6)	Methylene Chloride	7.21	84.0	61382	45.51	UG/L	9
7)	Acetone	8.22	43.0	20863	58.59	UG/L	9
8)	Carbon Disulfide	8.80	76.0	142477	48.08	UG/L	10
9)	Trichlorofluoromethane	9.38	101.0	130887	46.30	UG/L	10
10)	1,1-Dichloroethene	10.16	96.0	41999	47.87	UG/L	9
11)	1,1-Dichloroethane	11.44	63.0	94112	48.12	UG/L	9
12)	1,2-Dichloroethene (total)	12.21	96.0	46673	48.68	UG/L	8
13)	Chloroform	12.76	83.0	123010	47.85	UG/L	9
14)	1,2-Dichloroethane-d4	13.41	65.0	97522	50.10	UG/L	7
15)	1,2-Dichloroethane	13.53	62.0	107653	49.17	UG/L	9
16)	2-Butanone	13.53	43.0	24998	55.12	UG/L	9
17)	*1,4-Difluorobenzene	21.02	114.0	147894	50.00	UG/L	9
18)	1,1,1-Trichloroethane	14.81	97.0	108075	47.88	UG/L	7
19)	Carbon Tetrachloride	14.81	117.0	13224	6.64	UG/L	8
19)	Carbon Tetrachloride	15.24	117.0	97231	48.80	UG/L	9
20)	Vinyl Acetate	15.47	43.0	76109	51.64	UG/L	7
21)	Bromodichloromethane	15.74	83.0	103568	50.08	UG/L	9
22)	1,2-Dichloropropane	17.14	63.0	52222	51.38	UG/L	9
23)	cis-1,3-Dichloropropene	17.37	75.0	91822	50.54	UG/L	9
24)	Trichloroethene	17.99	130.0	63486	47.22	UG/L	9
25)	Dibromochloromethane	18.50	129.0	80431	47.99	UG/L	9
26)	1,1,2-Trichloroethane	18.62	97.0	46946	51.77	UG/L	9
27)	Benzene	18.54	78.0	144552	50.54	UG/L	8
28)	trans-1,3-Dichloropropene	18.65	75.0	90268	51.57	UG/L	9
29)	2-Chloroethylvinylether	19.74	63.0	32129	53.18	UG/L	6
30)	Bromoform	21.10	173.0	66529	47.45	UG/L	9
31)	*Chlorobenzene-d5	25.76	117.0	118847	50.00	UG/L	9
32)	4-Methyl-2-Pentanone	21.68	43.0	59673	53.40	UG/L	8
33)	2-Hexanone	23.19	43.0	45232	50.22	UG/L	10
34)	Tetrachloroethene	23.50	164.0	49794	46.71	UG/L	9
35)	1,1,2,2-Tetrachloroethane	23.39	83.0	58016	54.97	UG/L	9
36)	Toluene-d8	24.67	98.0	148361	48.91	UG/L	9
37)	Toluene	24.82	92.0	90301	49.17	UG/L	8
38)	Chlorobenzene	25.91	112.0	110839	47.88	UG/L	9
39)	Ethylbenzene	27.71	106.0	56932	47.69	UG/L	9
40)	Styrene	31.04	104.0	120379	49.08	UG/L	7
41)	Xylene (total)	31.32	106.0	75444	51.17	UG/L	9
41)	Xylene (total)	32.13	106.0	145946	98.99	UG/L	8

8428910355

	Compound	R.T.	Q ion	Area	Conc	Units
42)	Bromofluorobenzene	29.80	95.0	92818	48.82	UG/L

* Compound is ISTD

:CREP|889172,,00

QUANT REPORT

Operator ID: KS9934 Quant Rev: 8 Quant Time: 931206 19:49
Output File: 889172::01 Injected at: 931205 17:38
Data File: 889172::81 Dilution Factor: 1.00000
Name: INST 59952, VSTD050
Misc: VSTD050, QV2716, L,5,5,6'X2mm 1% SP1000 ON CBPK8

ID File: IDVOBK::50
Title: SPECIAL VOLATILE IDFILE
Last Calibration: 931203 16:06

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	Bromochloromethane	10.62	128.0	39450	50.00	UG/L	96
2)	Dichlorodifluoromethane	3.84	85.0	41313M	125.60	UG/L	100
2)	Dichlorodifluoromethane	3.84	85.0	33553	87.75	UG/L	100
3)	Acrolein	8.18	56.0	13534	237.50	UG/L	100
4)	Acrylonitrile	8.87	53.0	50904	270.03	UG/L	9'
6)	t-Butyl alcohol	12.02	59.0	15819	113.64	UG/L	96
9)	t-Butyl methyl ether	14.58	73.0	151581	45.78	UG/L	95
10)	1,4-Dioxane	18.55	88.0	5161M	2462.61	UG/L	
11)	* 1,4-Difluorobenzene	21.02	114.0	147384	50.00	UG/L	90
12)	Ethylene dibromide	19.47	107.0	153846	126.14	UG/L	92
13)	Diisopropyl ether	19.85	45.0	449887	140.28	UG/L	78
15)	* Chlorobenzene-d5	25.75	117.0	118847	50.00	UG/L	93
17)	o-Dichlorobenzene	35.10	145.0	117837	51.01	UG/L	95
17)	m-Dichlorobenzene	35.90	146.0	83370	27.47	UG/L	98
18)	p-Dichlorobenzene	35.90	146.0	115885M	52.42	UG/L	95
18)	p-Dichlorobenzene	35.90	146.0	83370	28.72	UG/L	98
19)	1-Dichlorobenzene	36.46	146.0	110154M	47.64	UG/L	95
19)	2-Dichlorobenzene	35.90	146.0	83370	27.39	UG/L	98

* Compound is ISTD

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
DECEMBER 14, 1993

Certified for: NJ, PA, DE, and NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

SURROGATE RECOVERY SUMMARY
Aqueous Volatile

Batch number: QV2718

Sample Number	Data File	% Recovery 1,2 DCE-d4	% Recovery Tol-d8	% Recovery BFB	# Outside QC Limits
BLANK	>B9142	84	96	97	0
178654 S	>B9143	82	98	94	0
178654 SD	>B9144	82	95	92	0
BLANK	>B9173	102	97	99	0
178795	>B9174	103	100	102	0
178794	>B9175	107	101	107	0
178793	>B9176	109	98	110	0
178792	>B9177	113	98	109	0

	Compound	Percent Recovery	Concentration Added
QC Limits:	1,2-Dichloroethane-d4	76-114	50ppb
	Toluene-d8	88-110	50ppb
	Bromofluorobenzene	86-115	50ppb

* Values outside QC Limits.

S= Spike sample
SD= Spike duplicate sample
DL= Dilution
RE= Indicates a reanalysis of the sample confirming matrix interference.
NA= Not Applicable

MEG

8428910358

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
DECEMBER 14, 1993

Certified for: NJ, PA, DE, and NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

QUALITY ASSURANCE DATA
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
Volatiles - Water

			Sample	MS	MSD
Spiked sample:	178654	Initial wt/vol:	5	5	5
QC Batch number:	QV2718	Final vol:	5	5	5

For samples: 178792 178793 178794 178795

Compound	Conc Added ug/L	Samp Conc ug/L	Conc MS ug/L	% Rec	Limits Recovery
1,1-Dichloroethene	50.0	U	45.5	91	61-145
Trichloroethene	50.0	U	48.1	96	71-120
Benzene	50.0	U	46.8	94	76-127
Toluene	50.0	U	45.0	90	76-125
Chlorobenzene	50.0	U	47.7	95	75-130

Compound	Conc Added ug/L	Conc MSD ug/L	% Rec	RPD	QC RPD	Limits Recovery
1,1-Dichloroethene	50.0	48.4	97	6	14	61-145
Trichloroethene	50.0	48.8	98	2	14	71-120
Benzene	50.0	47.8	96	2	11	76-127
Toluene	50.0	46.4	93	3	13	76-125
Chlorobenzene	50.0	49.4	99	4	13	75-130

* Values are outside QC Limits
** Spike recovery does not meet quality control limits due to a high concentration of this parameter in the spiked sample.

RPD: 0 out of 5 are outside QC limits.
Recovery: 0 out of 10 are outside QC limits.

MEG

8428910359

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): >B9141 Date Analyzed: 12/02/93

Instrument ID: 59952 Time Analyzed: 19:51

		IS1(BCM)		IS2(DFB)		IS3(CBZ)	
		AREA #	RT	AREA #	RT	AREA #	RT
	12 HOUR STD	29628	10.60	135384	21.04	114914	25.78
	UPPER LIMIT	59256	11.10	270768	21.54	229828	26.28
	LOWER LIMIT	14814	10.10	67692	20.54	57407	25.28
	LAB SAMPLE NO.						
1	BLANK	31521	10.66	127337	21.06	107370	25.84
2	1786549	33904	10.66	137545	21.06	116601	25.88
3	1786549D	32852	10.59	138858	21.02	116417	25.83
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22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

Conc.
50 PPB UPPER LIMIT = + 100%
50 PPB of internal standard area.
50 PPB LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

8428910361

9A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): 98172 Date Analyzed: 10/05/93

Instrument ID: 5985I Time Analyzed: 17:39

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	28460	10.62	147364	21.02	119347	25.76
UPPER LIMIT	73920	11.12	295795	21.52	227894	26.26
LOWER LIMIT	19000	10.12	73547	20.52	59424	25.26
LAB SAMPLE NO.						
1 BLANK	31201	10.64	137168	21.08	108168	25.81
2 178795	29946	10.63	135427	21.06	110287	25.84
3 178794	27295	10.58	122737	21.02	96870	25.78
4 178793	26041	10.62	115709	21.02	91142	25.78
5 178792	25515	10.58	109033	21.02	88381	25.78
6						
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17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

Conc.
50 PPB UPPER LIMIT = + 100%
50 PPB of internal standard area.
50 PPB LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

ANALYTICAL DATA REPORT PACKAGE

VECTRE CORPORATION

RCI-V2

REPORT GENERATION DATE: May 19, 1994
DATE SAMPLED: 04/20/94

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
ndolph, NJ 07869
1-584-0330

TABLE OF CONTENTS

ICM LABORATORIES (INDUSTRIAL CORROSION MANAGEMENT, INC.)
1152 ROUTE 10
RANDOLPH, NJ 07869
PHONE: (201) 584-0330 FAX: (201) 584-0515

MAY 19, 1994

CLIENT: VECTRE CORPORATION
SOURCE: RCI-V2

ANALYTICAL DATA SUMMARY REPORT FOOTNOTE PAGE

U = Indicates a compound was analyzed for but not detected.
For results marked U, the numerical value is the compound MDL.

J = Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit and greater than zero.

B = Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

W = Analytical Spike recovery for furnace AA analysis was not within control limits but was greater than or equal to 40%.

NA = Not Applicable.

Trip Blank pH is measured in laboratory.

IND = Indeterminable - compound decomposes in water.

ICM LABORATORIES (INDUSTRIAL CORROSION MANAGEMENT, INC.)
1152 ROUTE 10
RANDOLPH, NJ 07869
PHONE: (201) 584-0330 FAX: (201) 584-0515

MAY 19, 1994

CLIENT: VECTRE CORPORATION
SOURCE: RCI-V2

ANALYTICAL DATA SUMMARY REPORT

Client Sample Number	MW1
ICM Sample Number	186288
Sampling Date	04/20/94
Units	UG/L
GC METHOD 602	
Benzene	130
Toluene	51
Ethylbenzene	2200
p-Xylene	7500
m-Xylene	9800
o-Xylene	2000

1A

8428910365

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
[redacted]ndolph, NJ 07869
[redacted]1-584-0330
MAY 19, 1994

Certified for: NJ, PA, DE, and NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

ANALYTICAL DATA REPORT PACKAGE

Client: VECTRE CORPORATION
Sample Source: RCI-V2
Sampled By: Customer

SAMPLE ID:	MATRIX	LAB NUMBER	DATE & TIME COLLECTED	AT LAB DATE
MW1	Aqueous	186288	04/20/94 11:00	04/20/94

Supervisor/Manager Signature:

Richard S. Levine

BON

8428910366

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submissions. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

		Check if Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name & address, & date of report	✓
2.	Table of Contents	✓
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds	✓
4.	Summary Table cross-referencing field ID #'s vs. Lab ID #'s	✓
5.	Document bound, paginated and legible	✓
6.	Chain of Custody	✓
7.	Methodology Summary	✓
8.	Laboratory Chronicle and Holding Time Check	✓
9.	Results submitted on a dry weight basis (if applicable)	✓
10.	Method Detection Limits	✓
11.	Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP	✓
12.	Non-Conformance Summary	✓

Carla A. Mays — 5/18/94

ICM LABORATORIES
Quality Assurance Manager

Date

16

ICM LABORATORIES — CHAIN OF CUSTODY REPORT

CLIENT: VecTec Corp.
ADDRESS: Po Box 1091
PHONE : 383 2500
PROJECT: RCI-V2
PROJ. MGR.: Jerry Haug.
BILL TO: VecTec Corp.

SEND REPORT TO: VecTec Corp. PO Box 1091 Lafayette
IN CASE OF QUESTIONS UPON SAMPLE RECEIPT CALL: Jerry Haug.
PHONE: 383-2500

DELIVERABLES: June 7th.
- [x] REDUCED DELIVERABLES NON-CLP FORMAT
- [ ] REDUCED DEL. CLP FORMAT
- [ ] REGULATORY FORMAT
- [ ] FULL DEL. CLP FORMAT
- [ ] NPDES
- [ ] STATE FORMS REQUIRED

TURNAROUND TIME
FAX (PRELIMINARIES) (If required): Normal
HARDCOPY: Normal
COOLER TEMP: 5.0°C

LABORATORY ID CODE	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	COMPOSITE	SAMPLE MATRIX: GRAB	SOIL	LIQUID	SLUDGE	OTHER	# OF BOTTLES	ANALYSIS: b/et	PRESERVATIVES: H_2SO_4	HNO_3	HCL	NAOH	OTHER
186288	MW1.	4/20/94	1180		X		X			2	X					2
4																

SAMPLED BY: Jack Whaley
RELINQUISHED BY: Jack Whaley — DATE: 4/20/94 TIME: 120
RECEIVED BY: — DATE: 4/20/94 TIME: 130
RELINQUISHED BY: — DATE: 4/20/94 TIME: 1330
RECEIVED BY: — DATE: TIME:
RELINQUISHED BY: — DATE: TIME:
RECEIVED BY: — DATE: TIME:
RELINQUISHED BY: — DATE: TIME:
RECEIVED BY: — DATE: TIME:

COMMENTS: Method 602
Regular Turnaround.
No FB
No TB.
No Hydrochloric Acid
Bottles were flushed

COMPOUND LIST
- [ ] PRIORITY POLLUTANT
- [ ] TARGET COMPOUND LIST
- [ ] NJAC 7:14A APP B
- [ ] OTHER

CONCENTRATIONS EXPECTED
- [ ] HIGH
- [ ] MEDIUM
- [ ] LOW

IS SAMPLE CHLORINATED? [ ] YES [ ] NO

KNOWN HAZARD

8428910368

ICM Laboratories, Inc.
Internal Chain-of-Custody

LINK: 186288 - 186288

Account number: WA1532 VECTRE CORPORATION
Project: RCI-V2
Tier Level: Reduced 2

Laboratory Person Breaking Seal on Shuttle: Wendy

Title: LOG-IN

Lab Number	Relinq. By	Recd. By	Date	Time	Reason for Transfer	Aliquot I
All	WB	GD	04/20/94	18:00	STORAGE	ALL
All	GD	LT	5/3/94	05:00	602	V1
All	LT	GD	5/9/94	13:00	STORAGE	V1

8428910369

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330

NJ DEP and PA DER Certified
NJ DEP Lab ID# 14116
US EPA Historic CLP Lab

LABORATORY CHRONICLE

DATE SAMPLED: 4/20/94 PRESERVATIVE: 4 degrees C

DATE RECEIPT/REFRIGERATION: 4/20/94 COOLER TEMP: 5.0°C

GC VOLATILES:

Lab ID#	Date Analyzed	pH
186288	5/4,5/5/94	—

DEPT. SUPERVISOR:

QA REVIEW & APPROVAL:

8428910370

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

	NO	YES
1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)	___	✓
2. Standards Summary Submitted	___	✓
3. Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis	___	✓

4. Blank Contamination - If yes, list compounds and concentrations in each blank:

a. VOA Fraction _____
b. B/N Fraction _____
c. Acid Fraction _____
d. Pesticides/PCB's _____
e. Other _____

5. Surrogate Recoveries Meet Criteria (if applicable)	___	✓

If not met, list those compounds and their recoveries which fall outside the acceptable range:

a. VOA Fraction _____
b. B/N Fraction _____
c. Acid Fraction _____
d. Pesticides/PCB's _____
e. Other _____

If not met, were the calculations checked and the results qualified as "estimated?"	___	___
6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (if applicable)	___	✓

(If not met, list those compounds and their recoveries which fall outside the acceptable range)

a. VOA Fraction _____
b. B/N Fraction _____
c. Acid Fraction _____
d. Pesticides/PCB's _____
e. Other _____

7. Retention Time Shift Meet Criteria (if applicable) — NA —

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT (CONTINUED)

		NO	YES
8.	Extraction Holding Time Met.		-NA-
	If not met, list number of days exceeded for each sample:		
9.	Analysis Holding Time Met	✓*	
	If not met, list number of days exceeded for each sample:		

Additional Comments: * Sample not preserved. HCl flushed out of bottle during sampling.

Laboratory Manager: Matthew Cadra Date: 5/19/94

8428910372

Volatile Aromatic Compounds
*40 Code of Federal Regulations
**Method 602

* Indicates reference.
** Indicates method.

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 5, 1994

Certified for: NJ, PA, DE, and NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

COMPLIANCE MONITORING FOR VOLATILE ORGANICS METHOD 602
PID Detector, 2 component trap, xylenes not required for compliance
Compounds reported in micrograms/liter (parts/billion)

Lab Number: 186288
Client: VECTRE CORPORATION
Sample source: RCI-V2
Sample ID: MW1
Sample date: 04/20/94
Sampled by: Customer
Analysis Date: 05/04/94 05/05/94
Column: SP1200/BENTONE-2mm
At lab date: 04/20/94
Dilution Factor: 1
Matrix: WATER
Init Sample vol= 5ml
Final volume= 5ml

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Benzene	130	U	1	0.3
Toluene	51	U	1	0.3
Ethylbenzene	2200	U	1	0.3
p-Xylene	7500	U	1	0.5
m-Xylene	9800	U	1	0.5
o-Xylene	2000	U	1	0.6

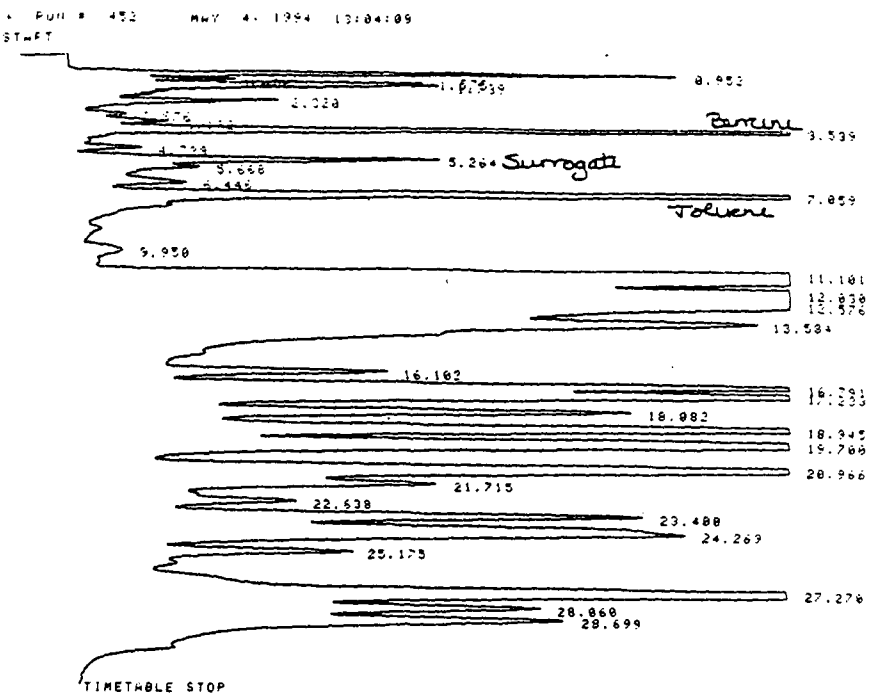
ug/l = micrograms/liter or ppb

U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

ND: Not Determined.

LIS

8428910374



RUN# 452 MAY 4, 1994 13:04:08

AREA%

PT	AREA	TYPE	WIDTH	AREA%
.952	72226	PV	.179	1.17268
1.219	17324	VV	.157	.28128
1.406	10415	VV	.101	.16910
1.575	41697	VV	.177	.67701
1.739	36118	VV	.147	.58642
2.320	29833	VV	.218	.48438
2.876	7381	VV	.209	.11984
3.182	16514	VV	.263	.26813
3.539	248567	VV	.168	4.03581
4.728	8645	VP	.198	.14036
5.264	63176	PV	.261	1.02575 117%
5.668	30276	VV	.388	.49157
6.446	28297	VV	.487	.45944
7.859	257257	VV	.254	4.17691
9.950	12392	PV	.489	.20120
11.101	959246	VV	.451	15.57463
12.030	381724	VV	.508	6.19780
12.576	397139	VV	.693	6.44808
13.584	410361	VV	.917	6.66276
16.102	87621	VV	.430	1.42264
16.791	190636	VV	.354	3.09523
17.233	270399	VV	.451	4.39028
18.082	153439	VV	.420	2.49128
18.945	279844	VV	.475	4.54364
19.708	337164	VV	.531	5.47438

OUT OF PAPER: FEED W/ENTER, RESUME W/ESC .

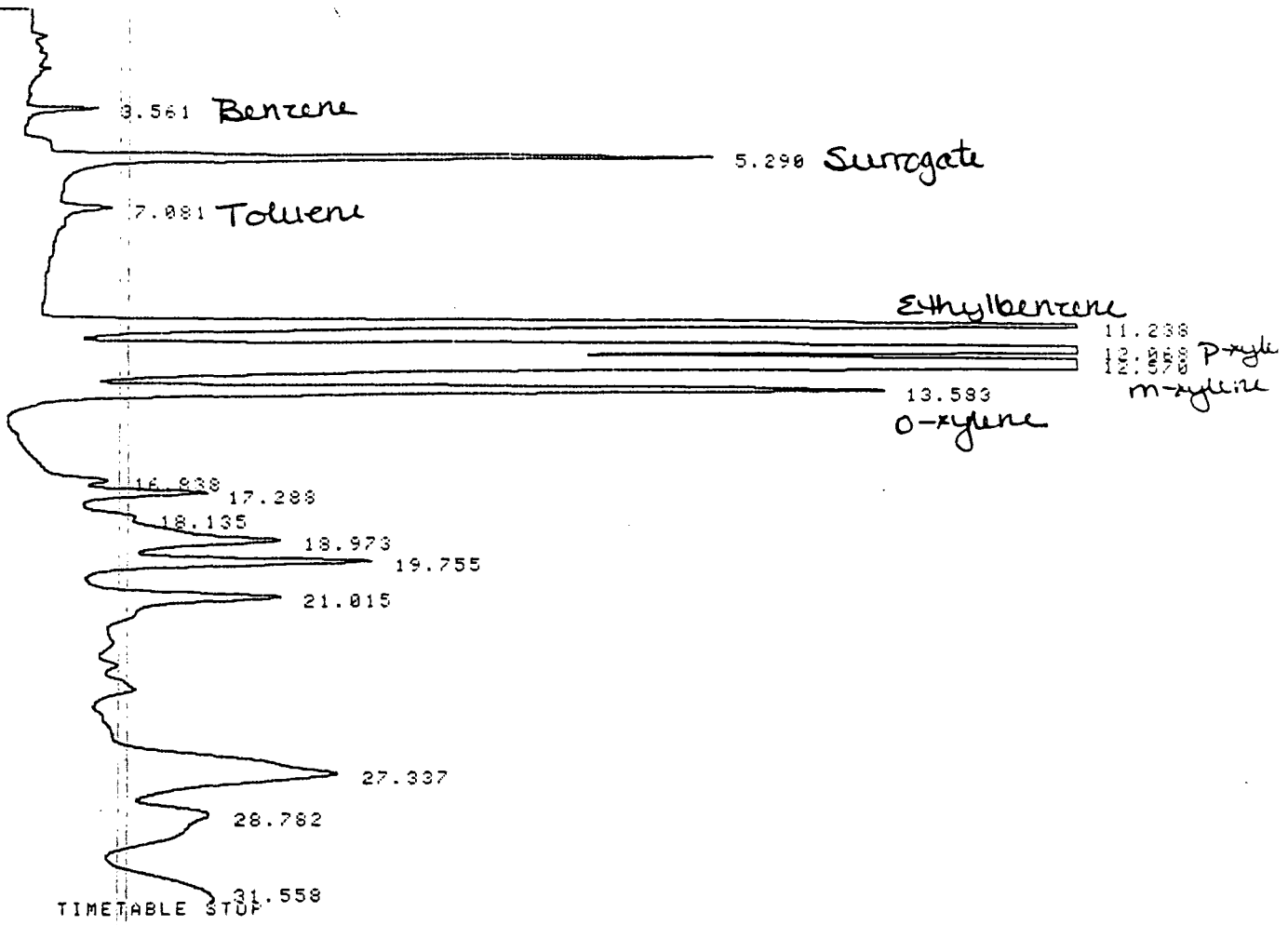
20.966	299932	VV	.522	4.86979
21.715	109245	VV	.461	1.77374
22.638	62831	VV	.441	1.02014
23.488	169646	VV	.455	2.75443
24.269	291735	VV	.729	4.73678
25.175	78848	VV	.434	1.28028
27.270	413083	VV	.626	6.70695
28.060	143211	VV	.466	2.32522
28.699	242808	VV	.753	3.94231

TOTAL AREA=6159030
MUL FACTOR=1.0000E+00

* RUN # 454 MAY 4, 1994 14:48:30

186288/50

START



TIMETABLE STUP

RUN# 454 MAY 4, 1994 14:48:30

AREA%

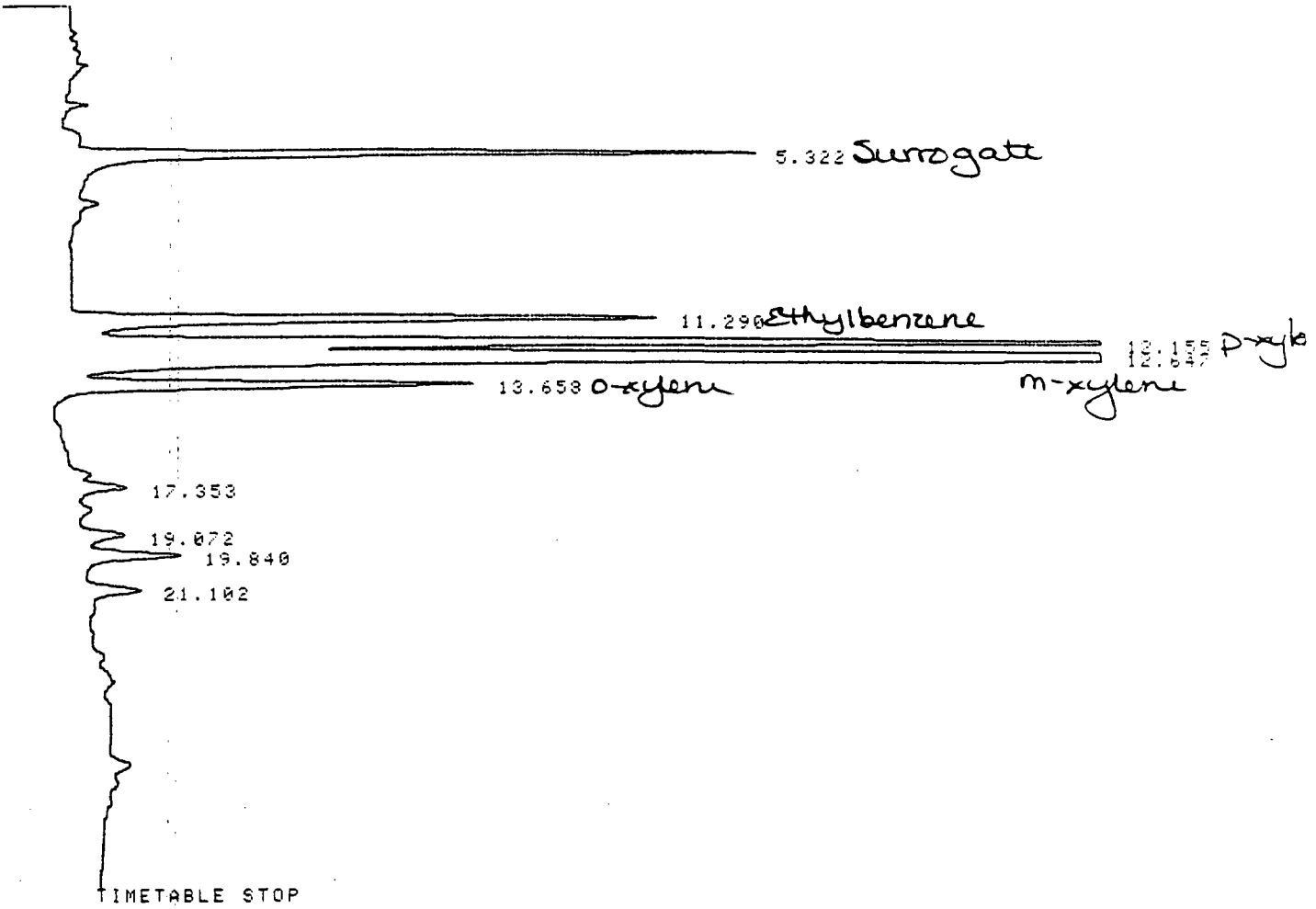
RT	AREA	TYPE	WIDTH	AREA%
3.561	5948	BV	.174	.39796
5.290	64927	PB	.217	4.34404 120%
7.081	5653	PV	.242	.37822
11.238	176494	VV	.285	11.80859
12.068	311123	VV	.287	20.81614
12.570	483456	VV	.397	32.34634
13.583	127317	VB	.319	8.51833
16.838	13401	VV	.411	.89661
17.288	27890	VV	.372	1.86602
18.135	14046	VV	.378	.93977
18.973	67680	VV	.695	4.52823
19.755	46937	VV	.351	3.14039
21.015	38694	VV	.451	2.58888
27.337	95442	VP	.988	6.38569
28.782	12507	PV	.534	.83680
31.558	3109	PV	.418	.20801

TOTAL AREA=1494624

12

1862881200

* RUN # 459 MAY 4, 1994 18:17:45
START



RUN# 459 MAY 4, 1994 18:17:45

AREA%

RT	AREA	TYPE	WIDTH	AREA%
5.322	69265	BB	.223	8.89192 \28%
11.290	79432	PV	.293	10.19711
12.155	151792	VV	.276	19.48634
12.647	382453	VV	.325	49.09752
13.658	57357	VP	.301	7.36323
17.353	7595	VV	.320	.97501
19.072	7449	PV	.359	.95627
19.840	15546	VV	.342	1.99572
21.102	8077	BV	.334	1.03689

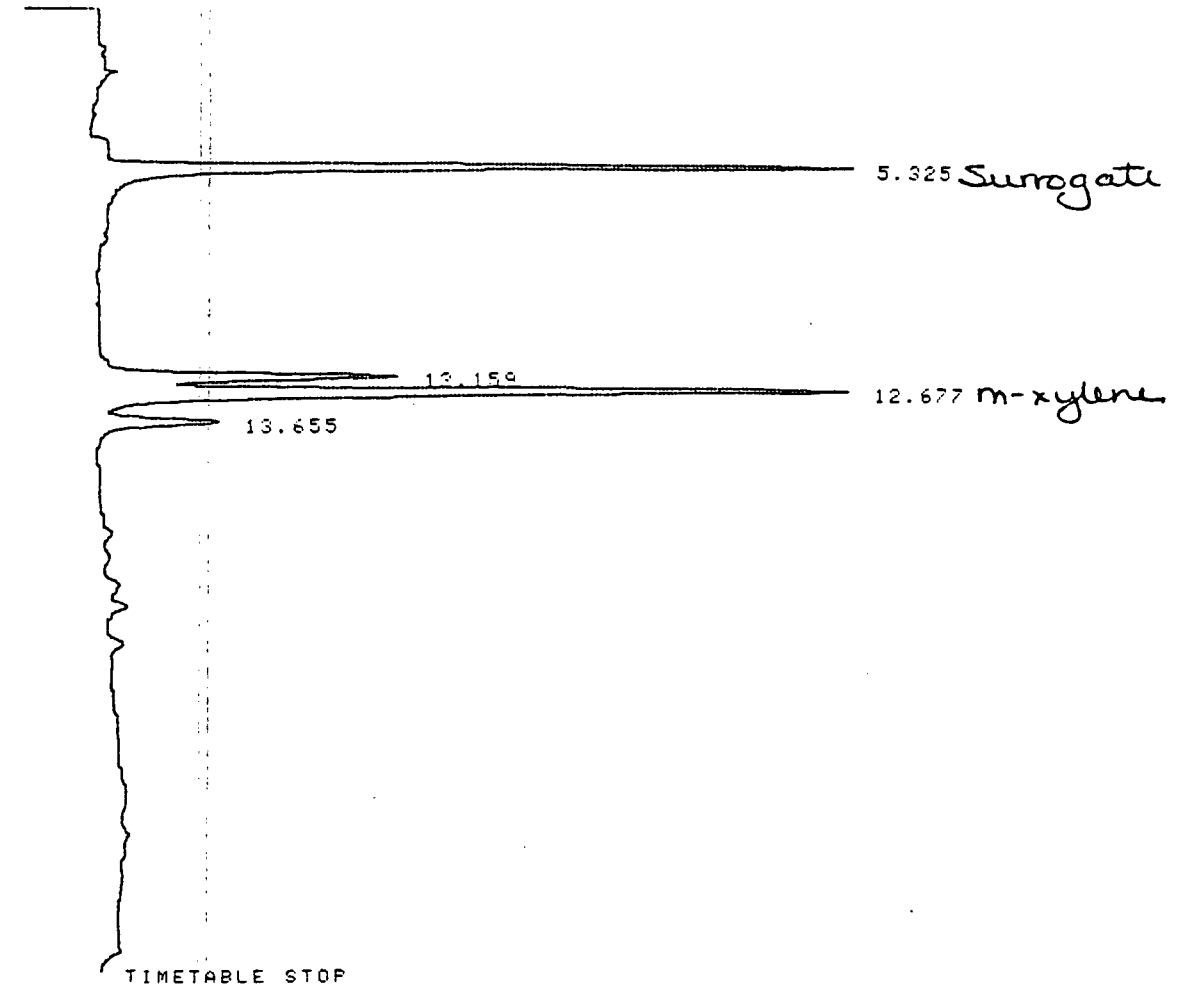
TOTAL AREA= 778966
MUL FACTOR=1.0000E+00

8428910377

186288/500

* RUN # 463. MAY 5, 1994 12:02:21

START



TIMETABLE STOP

RUN# 463 MAY 5, 1994 12:02:21

AREA%

RT	AREA	TYPE	WIDTH	AREA%
5.325	70105	BB	.223	32.24835
12.159	35131	BV	.283	16.16029
12.677	95398	VV	.300	43.88314
13.655	16757	VP	.325	7.70823

11%

TOTAL AREA= 217391

MUL FACTOR=1.0000E+00

MUL FACTOR=1.0000E+00

8428910378

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
(201)- 584-0330

Certified for NJ, PA, DE and NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

METHOD BLANK SUMMARY
GC Method 602
Results reported in ug/l

Column Used: SP1200/BENTONE-2mm
Primary Column
Analysis Date: 05/04/94

INSTRUMENT ID: GC 565
SAMPLE VOLUME: 5ml
DILUTION FACTOR: 1

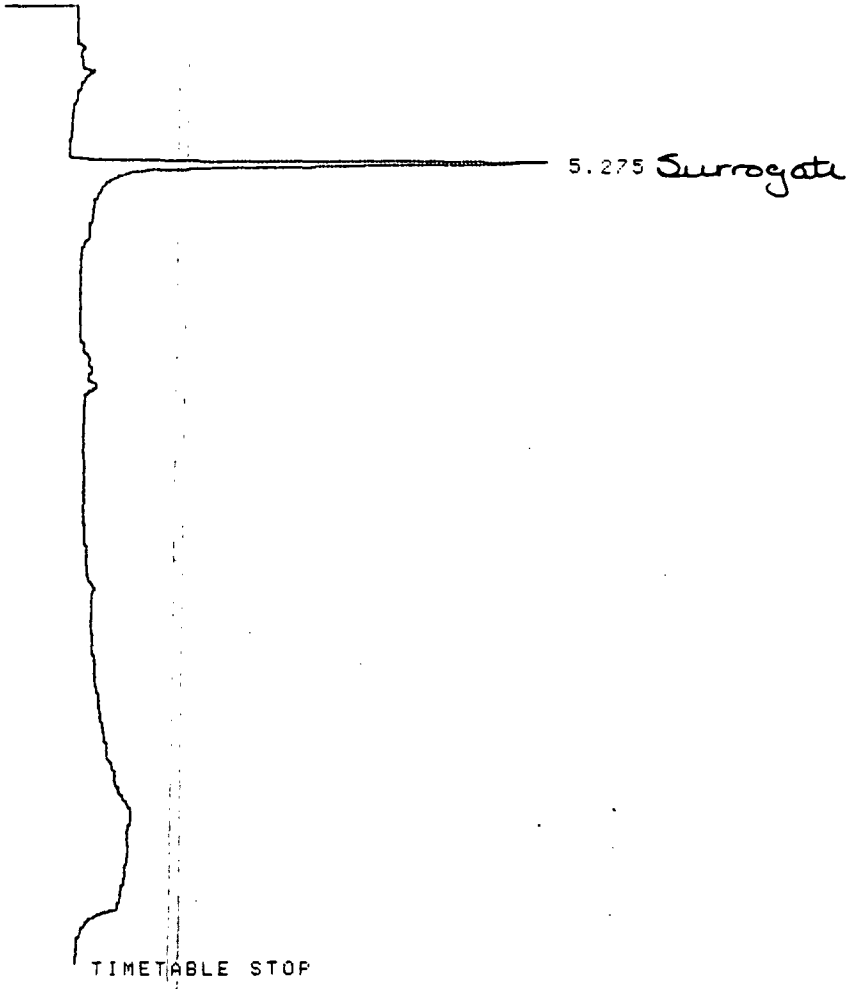
ANALYTE	RESULT	PQL	MDL
BENZENE	U	1	0.3
TOLUENE	U	1	0.3
ETHYLBENZENE	U	1	0.3
P-XYLENE	U	1	0.5
M-XYLENE	U	1	0.5
O-XYLENE	U	1	0.6

Associated samples: 186288

Blank

* RUN # 450 MAY 4, 1994 11:50:13

START



TIMETABLE STOP

RUN# 450 MAY 4, 1994 11:50:13

AREA%

RT	AREA	TYPE	WIDTH	AREA%
5.275	39137	BB	.201	100.00000 72%

8428910380

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
(201)- 584-0330

Certified for NJ, PA, DE and NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

CALIBRATION STANDARD SUMMARY
GC Method 602
Results reported in ug/l

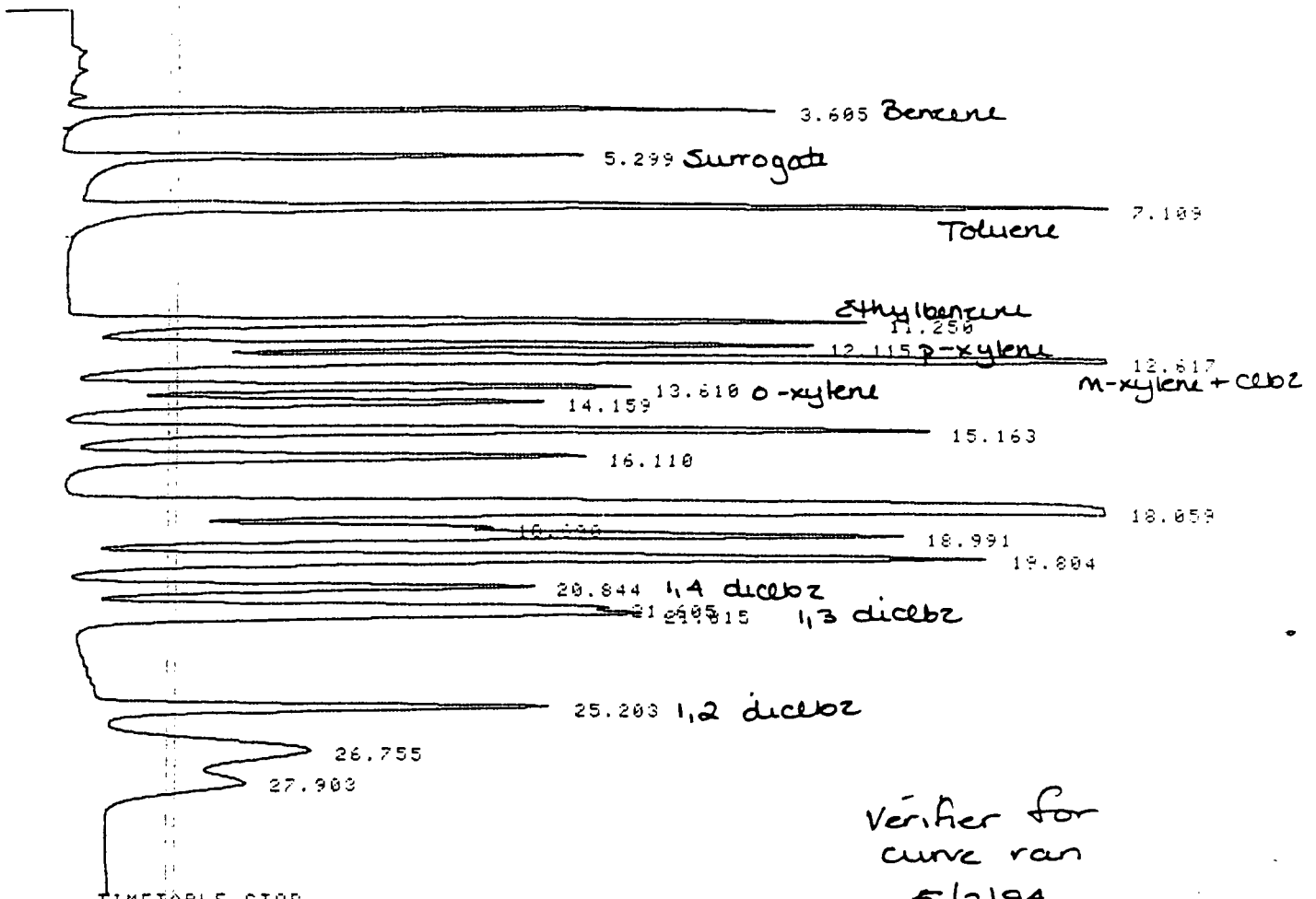
Column Used: SP1200/BENTONE-2mm
Primary Column
Analysis date: 05/04/94
Analysis time: 11:11:47

INSTRUMENT ID: GC 565
SAMPLE VOLUME: 5ml

ANALYTE	INITIAL CALIB. FACTOR	CONT. CALIB. FACTOR	% DIF	RT	-	WINDOW
BENZENE	4711	5084	7.9	3.455	-	3.755
TOLUENE	9886	11399	15.3	6.959	-	7.259
ETHYLBENZENE	9419	10551	12	11.1	-	11.4
P-XYLENE	10102	9412	6.8	11.965	-	12.265
M-XYLENE	19494	19845	1.8	12.467	-	12.767
O-XYLENE	8400	7417	11.7	13.46	-	13.76

Associated samples: 186288 BLANK

QC 20



Verifier for curve ran 5/2/94 20:56 - 23:02

RUN# 449 MAY 4, 1994 11:11:47

AREA%

RT	AREA	TYPE	WIDTH	AREA%	
3.605	50838	BB	.157	2.55319	21.58
5.299	47924	BB	.204	2.40684	89%
7.109	113990	BB	.232	5.72482	23.06
11.250	105513	BV	.285	5.29908	22.40
12.115	94124	VV	.273	4.72710	18.63
12.617	198450	VV	.288	9.96657	40.72
13.610	74165	VV	.286	3.72472	17.66
14.159	67442	VV	.307	3.38708	
15.163	117887	VV	.294	5.92053	
16.110	75021	VV	.313	3.76771	
18.059	299583	BV	.503	15.04568	
18.690	47158	VV	.244	2.36837	
18.991	129878	VV	.335	6.52274	
19.804	153866	VP	.362	7.72747	
20.844	67826	PV	.318	3.40636	18.20
21.605	60551	VV	.247	3.04100	19.42
21.815	84087	VV	.323	4.22302	
25.203	63820	PV	.310	3.20517	18.35
26.755	86375	BV	.932	4.33793	
27.903	52658	VP	.831	2.64459	

TOTAL AREA=1991156
MUL FACTOR=1.0000E+00

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 5, 1994

Certified for: NJ, PA, DE, and NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

GC SURROGATE RECOVERY SUMMARY
Aqueous Volatile

Batch number: QV0111

Sample Number	Data File	% Recovery aaaTrifltol	# Outside QC Limits
BLANK	450	72	0
186288	452	117	0
186288/50	454	120	0
186288/200	459	128	0
BLANK	462	108	0
186288/500	463	117	0
187321 S	467	106	0

	Compound	Percent Recovery	Concentration Added
QC Limits:	aaa-Trifluorotoluene	70-130	30ppb

* Values outside QC Limits.

S= Spike sample
SD= Spike duplicate sample
DL= Dilution
RE= Indicates a reanalysis of the sample confirming matrix interference.
NA= Not Applicable

LYN

8428910383

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
[redacted]ndolph, NJ 07869
[redacted]1-584-0330
MAY 5, 1994

Certified for: NJ, PA, DE, and NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

QUALITY ASSURANCE DATA
COMPLIANCE METHOD 602
Compounds reported in micrograms/liter (parts/billion)

Lab Number: 187321

This report serves as Quality Assurance Data for the following lab numbers:
186288

Parameter	Spike Recovery %	QC LIMITS
Benzene	91	39-150
Toluene	107	46-148
Ethylbenzene	119	32-160
p-Xylene	102	32-160
m-Xylene	119	32-160
o-Xylene	89	32-160

RPD = Relative percent difference
* Xylenes not required for compliance

INDUSTRIAL CORROSION MANAGEMENT, Inc.
Richard Levine, President

LIS

8428910384

Albert
Copy

Reichhold Chemicals, Inc.
Corporate Headquarters
P.O. Box 13582
Research Triangle Park, NC 27709-3582

REICHHOLD

January 18, 1996

Mr. Dan Bello
State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 029
Trenton, NJ 08625-0029

Re: Analytical Data Report Package
Reichhold Chemicals, Inc.
46 Albert Avenue
Newark, NJ 07105
Facility Registration No. 0226253
Closure Approval Nos. C-92-3204, C-92-3205, C-92-3206
NJDEPE Case No. 92-11-5-1220-55

Dear Mr. Bello:

Attached is an Analytical Data Report Package prepared by Vectre Corporation, which summarizes the result of June 30, 1995 groundwater sampling taken from monitoring well, MW-1 at the subject site. Supporting information is also included.

This data supplements the initial Remedial Investigation Report (RIR) submitted to the Department in March 1993. Based on the detection of xylene in groundwater reported in the RIR, a second round of samples was collected on June 22, 1993 from MW-1, the monitoring well immediately in the vicinity of the former underground storage tanks. In addition, an initial groundwater sample was collected from a new monitoring well, MW-2, to measure possible contribution of contaminants from the upgradient direction.

As stated in Vectre's September 20, 1993 letter submitted to the Department in November 1993, xylene concentrations at MW-1 decreased to below NJDEPE groundwater cleanup standards. Therefore, all constituents in both wells were below NJDEPE cleanup standards on June 22, 1993.

The results of the next two sampling events in November 1993 and April 1994 indicate that xylene and ethylbenzene returned to levels which exceed the state's prescribed cleanup levels.

Tel: (919) 990-7500
Fax: (919) 990-7711

The results of the June, 30, 1995 sampling event (enclosed) continue to show elevated levels of xylene, benzene and ethylbenzene. Reichhold proposes to collect another round of groundwater date from both MW-1 and MW-2 in March 1996. Vectre Corporation has been authorized to perform this work and the results of the analysis will be submitted to your attention on or before June 1996. Reichhold will propose additional sampling or corrective measures, as appropriate, based on the results of the 1996 sampling.

Please contact me at (919) 990-8297 if you have any questions regarding this matter.

Sincerely,

Kelly H. Stynes

bcc: M. Baxi - RCI/Newark
D. Bright - RCI/RTP
J. Freeman - RCI/Newark
J. Haug - Vectre Corp. with attachments
R. Kurtz - RCI/Newark with attachments
M. Silvester - Vectre Corp.
D. Uyesato - RCI/RTP

VECTRE™
CORPORATION
"Environmental Integrity with Efficiency"

P.O. Box 930
Lafayette, New Jersey 07848-0930
(201) 383-2500
Fax: (201) 579-0025

September 11, 1995

Mr. Paul Brustofsky
Regional Environmental Engineer
Reichhold Chemicals, Inc.
P.O. Box 13582
Research Triangle Park, NC 27709-3582

RE: Remedial Investigation for 46 Albert Avenue, Newark, New Jersey
Project: RCI-V3
NJDEP Case # 92-11-05-1220-55

Dear Mr. Brustofsky:

This letter summarizes the results of ground water sampling conducted at the Reichhold Chemical facility at 46 Albert Avenue, Newark on June 30, 1995. The purpose of the sampling was to assess the current condition of ground water beneath the Reichhold site. Historically, monitoring well MW-1 has exhibited ground water contamination exceeding the NJDEP Ground Water Quality Standards.

Ground-Water

A ground water sample was collected from monitoring well MW-1 on June 30, 1995 (see Figure 1, Appendix A). The sample was collected in accordance with the procedures detailed in the NJDEP Field Sampling Procedures Manual published in May, 1992. Subsequent to collection, the ground water sample was transported to ICM Laboratories in Randolph, New Jersey for analysis of BTEX (benzene, toluene, ethylbenzene, and total xylenes) compounds. In addition, appropriate Quality Assurance/Quality Control (QA/QC) samples (a field and trip blank) were obtained and also analyzed for BTEX compounds. The results of the ground water sample analysis are discussed in the following section.

Ground-Water Sample Results

Analytical results of the ground water sample are summarized in Table 1, and a copy of the complete laboratory report is attached as Appendix B. For the purpose of comparison, the results of the previous two ground water sampling rounds are included in Table 1.

TABLE 1

Analytical Results of Ground Water Samples from MW-1

COMPOUND	SAMPLING DATE			NJDEP Groui Water Class I Standards
	11-30-93	4-20-94	6-30-95	
Benzene	130 J	130	120	1
Toluene	U (250)	51	38	1,000
Ethylbenzene	5,900	2,200	6,600	700
Total Xylenes	20,000	19,300	18,500	40

Values are in micrograms per liter (μg/l).
U - Compound was not detected (method detection limit in parentheses).
J - Compound detected, but below method detection limit.
Values exceeding the NJDEP Class II-A Ground Water Quality Standard are in shaded boxes.

As indicated by the above table, benzene, ethylbenzene, and total xylenes were detected at concentrations exceeding the NJDEP Class II-A Ground Water Quality Standards (GWQS) for the three sampling rounds.

Conclusions/Recommendations

Based on the findings from the current ground water investigation, the following conclusions can be made:

1) Evaluation of the laboratory data associated with ground water monitoring well MW-1 indicated that benzene, ethylbenzene, and total xylenes are present in concentrations exceeding NJDEP GWQS for the past three sampling rounds.

2) Although the results of the most recent round of sampling indica decrease (with the exception of ethylbenzene) in contaminant con over time, the concentrations continue to be well above the NJDEI

3) Due to the current concentrations of contaminants in ground v MW-1, the NJDEP will request delineation of the contamina applicable, the submission of a Remedial Action Workplan.

TABLE 1

Analytical Results of Ground Water Samples from MW-1

COMPOUND	SAMPLING DATE			NJDEP Ground Water Class II-A Standards
	11-30-93	4-20-94	6-30-95	
Benzene	130 J	130	120	1
Toluene	U (250)	51	38	1,000
Ethylbenzene	5,900	2,200	6,600	700
Total Xylenes	20,000	19,300	18,500	40

Values are in micrograms per liter (μg/l).
U - Compound was not detected (method detection limit in parentheses).
J - Compound detected, but below method detection limit.
Values exceeding the NJDEP Class II-A Ground Water Quality Standard are in shaded boxes.

As indicated by the above table, benzene, ethylbenzene, and total xylenes were detected at concentrations exceeding the NJDEP Class II-A Ground Water Quality Standards (GWQS) for the three sampling rounds.

Conclusions/Recommendations

Based on the findings from the current ground water investigation, the following conclusions can be made:

1) Evaluation of the laboratory data associated with ground water monitoring well MW-1 indicated that benzene, ethylbenzene, and total xylenes are present in concentrations exceeding NJDEP GWQS for the past three sampling rounds.

2) Although the results of the most recent round of sampling indicate a slight decrease (with the exception of ethylbenzene) in contaminant concentrations over time, the concentrations continue to be well above the NJDEP's GWQS.

3) Due to the current concentrations of contaminants in ground water from MW-1, the NJDEP will request delineation of the contaminants and, if applicable, the submission of a Remedial Action Workplan.

If you have any questions or require additional information, please do not hesitate to call.

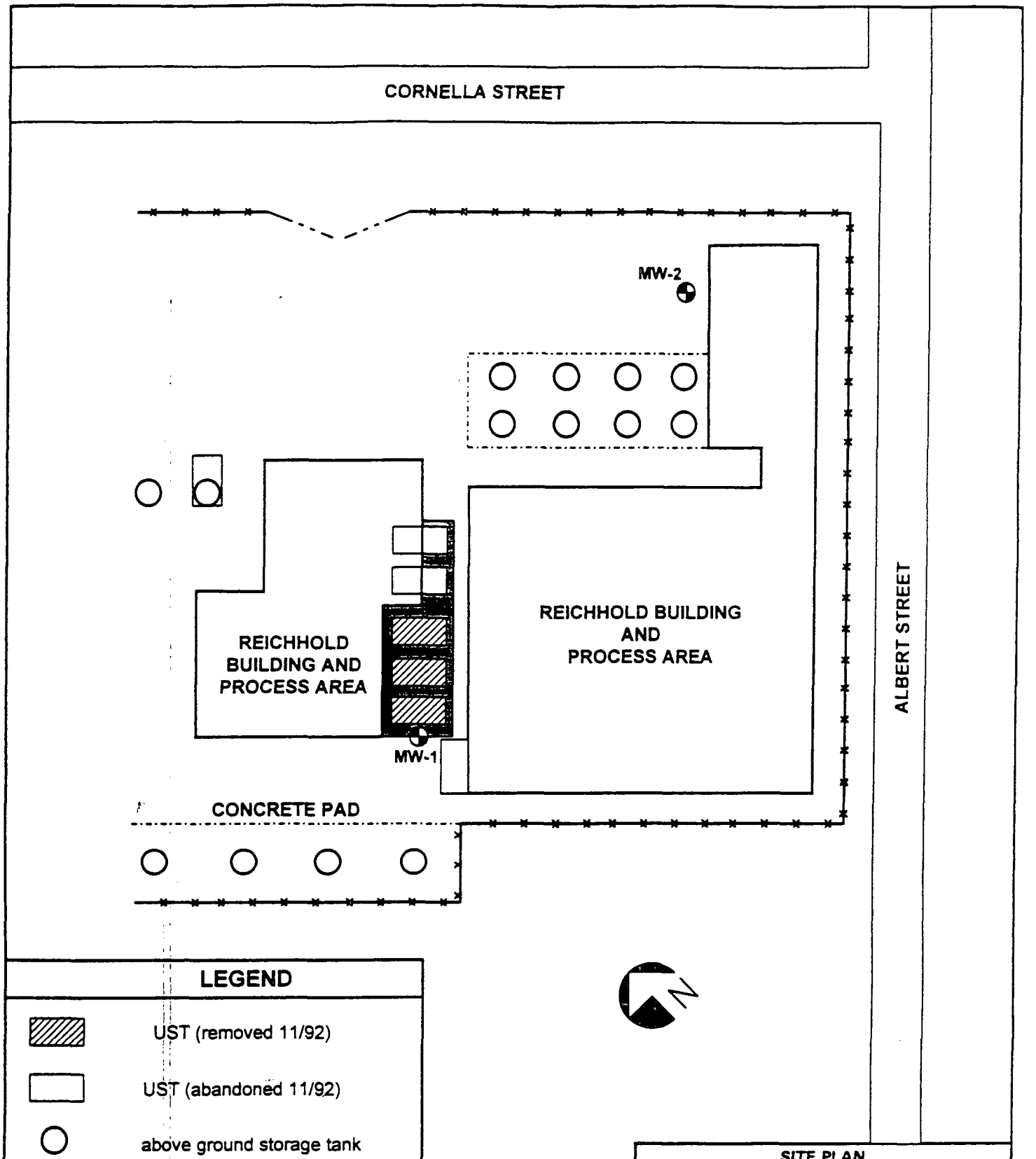
Sincerely yours,
VECTRE CORPORATION

Jerry L. Haug, CPG
Senior Manager

Enclosure

cc: Michael Baxi, Reichhold Chemical Co.

APPENDIX A - SITE PLAN



LEGEND

- UST (removed 11/92)
- UST (abandoned 11/92)
- above ground storage tank
- MW-1 monitor well
- backfill (former excavation area)
- concrete wall (berm)

SITE PLAN
SHOWING MONITOR WELL LOCATIONS

REICHHOLD CHEMICALS

NEWARK NEW JERSEY

SCALE: 1in. = 50ft.

FIGURE NUMBER	PROJECT NUMBER
1	RCI-V3

VECTRE™ Corporation

APPENDIX B - LABORATORY DATA PACKAGE

ANALYTICAL DATA REPORT PACKAGE

VECTRE CORPORATION

RCI-V3

REPORT GENERATION DATE: July 19, 1995
DATE SAMPLED: 06/30/95

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330

TABLE OF CONTENTS

ICM LABORATORIES (INDUSTRIAL CORROSION MANAGEMENT, INC.)
1152 ROUTE 10
RANDOLPH, NJ 07869
PHONE: (201) 584-0330 FAX: (201) 584-0515

JULY 19, 1995
14:41:56

CLIENT: VECTRE CORPORATION
SOURCE: RCI-V3

ANALYTICAL DATA SUMMARY REPORT FOOTNOTE PAGE

U = Indicates a compound was analyzed for but not detected.
For results marked U, the numerical value is the compound MDL.

J = Indicates an estimated value. It is utilized when a reported value meets the identification.
criteria but the result is less than the specified detection limit and greater than zero.

B = Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

W = Analytical Spike recovery for furnace AA analysis was not within control limits but was greater than or equal to 40%.

NA = Not Applicable.

Trip Blank pH is measured in laboratory.

IND = Indeterminable - compound decomposes in water.

+ = Indicates that an MDL was not available for this compound. PQL was reported.

P = Positive

N = Negative

MARYL

ICM LABORATORIES (INDUSTRIAL CORROSION MANAGEMENT, INC.)
1152 ROUTE 10
RANDOLPH, NJ 07869
PHONE: (201) 584-0330 FAX: (201) 584-0515

JULY 19, 1995
14:41:45

CLIENT: VECTRE CORPORATION
SOURCE: RCI-V3

ANALYTICAL DATA SUMMARY REPORT

Client Sample Number	TB	FB	MW-1
ICM Sample Number	214854	214855	214856
Sampling Date	06/30/95	06/30/95	06/30/95
Units	UG/L	UG/L	UG/L
GC METHOD 602			
Benzene	1.0 U	1.0 U	120
Toluene	1.0 U	2	38
Ethylbenzene	1.0 U	1.0 U	6600
m+p-Xylene	1.0 U	1	17000
o-Xylene	1.0 U	0.5	1500

1A

842891039?

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
JULY 19, 1995

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

ANALYTICAL DATA REPORT PACKAGE

Client: VECTRE CORPORATION
Sample Source: RCI-V3
Sampled By: Customer

SAMPLE ID:	MATRIX	LAB NUMBER	DATE & TIME COLLECTED	AT LAB DATE
TB	Aqueous	214854	06/30/95	06/30/95
FB	Aqueous	214855	06/30/95 10:20	06/30/95
MW-1	Aqueous	214856	06/30/95 10:35	06/30/95

Supervisor/Manager Signature:

Richard S. Levine

MAR

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submissions. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

		Check if Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name & address, & date of report	✓
2.	Table of Contents	✓
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds	✓
4.	Summary Table cross-referencing field ID #'s vs. Lab ID #'s	✓
5.	Document bound, paginated and legible	✓
6.	Chain of Custody	✓
7.	Methodology Summary	✓
8.	Laboratory Chronicle and Holding Time Check	✓
9.	Results submitted on a dry weight basis (if applicable)	NA
10.	Method Detection Limits	✓
11.	Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP	✓
12.	Non-Conformance Summary	✓

Carla Tramp — 7/17/95

ICM LABORATORIES — Date

Quality Assurance Manager

ICM LABORATORIES — CHAIN OF CUSTODY REPORT

CLIENT: VECTRE CORPORATION
ADDRESS: P.O. BOX 930
LAFAYETTE, N.J. 07848
PHONE: 201-383-2500
PROJECT: RCI-U3
PROJ. MGR.: JERRY HAUG

BILL TO: VECTRE CORPORATION
SEND REPORT TO: VECTRE CORP.
IN CASE OF QUESTIONS UPON SAMPLE RECEIPT CALL: JERRY HAUG
PHONE: 201-383-2500

DELIVERABLES: JUNE 7th
- [X] REDUCED DELIVERABLES NON-CLP FORMAT
- [ ] REDUCED DEL. CLP FORMAT
- [ ] REGULATORY FORMAT
- [ ] FULL DEL. CLP FORMAT
- [ ] NPDES
- [ ] STATE FORMS REQUIRED

TURNAROUND TIME
FAX (PRELIMINARIES) (If required): 14 DAYS
HARDCOPY: 21 DAYS
COOLER TEMP: 2.4°C

LABORATORY ID CODE	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	COMPOSITE	SAMPLE MATRIX: GRAB	SOIL	LIQUID	SLUDGE	OTHER	# OF BOTTLES	ANALYSIS: BTEX 602	PRESERVATIVES: H_2SO_4	HNO$_3$	HCl	NAOH	OTHER
214854	TB	6/30/95	—		X		X			3	X			X		
214855	FB	↓	10:20		X		X			3	X			X		
214856	MW-1	↓	10:35		X		X			3	X			X		

SAMPLED BY: David McMullen — DATE: 6/30/95 TIME: 10:20
RELINQUISHED BY: David McMullen — DATE: 6/30/95 TIME: 16:30
RECEIVED BY: Anne G. Keller — DATE: 6-30-95 TIME: 16:30
RELINQUISHED BY — DATE: TIME:
RECEIVED BY: — DATE: TIME:
RELINQUISHED BY — DATE: TIME:
RECEIVED BY: — DATE: TIME:

COMMENTS:

COMPOUND LIST
- [ ] PRIORITY POLLUTANT
- [ ] TARGET COMPOUND LIST
- [ ] NJAC 7:14A APP B
- [ ] OTHER

CONCENTRATIONS EXPECTED
- [ ] HIGH
- [ ] MEDIUM
- [ ] LOW

IS SAMPLE CHLORINATED? [ ] YES [ ] NO

KNOWN HAZARD

P.O. #4688

PAGE 1 of 1

4

8428910400

ICM Laboratories, Inc.
Internal Chain-of-Custody

LINK: 214854-214856

Account number: WA1532 VECTRE CORPORATION
Project: RCI-V3
Tier Level: Reduced 2

Laboratory Person Breaking Seal on Shuttle: Jaime G. Keller

Title: SMS

Lab Number	Reling. By	Recd. By	Date	Time	Reason for Transfer	Aliquot ID
ALL	MK	MK	06/30/95	4:00	STORAGE	ALL
All	TY	~~~	7/6/95	10:50	602 / depleted	Hv1 & Hv2

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
(201) 584-0330

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

LABORATORY CHRONICLE

DATE SAMPLED: 06/30/95 PRESERVATIVE: 4 degrees C, HCl

DATE RECEIPT/REFRIGERATION: 06/30/95 Cooler Temp: 2.4°C

GC VOLATILES:

LAB ID #	DATE ANALYZED	pH
214854	07/10/95	<2
214855	07/10/95	<2
214856	07/10/95	<2

DEPT. SUPERVISOR: Daniel Edell

QA REVIEW & APPROVAL: Carla Morp

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		NO	YES
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)	____	✓
2.	Standards Summary Submitted	____	✓
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis	____	✓
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		
	a. VOA Fraction _____		
	b. B/N Fraction _____		
	c. Acid Fraction _____		
	d. Pesticides/PCB's _____		
	e. Other _____		
5.	Surrogate Recoveries Meet Criteria (if applicable)	____	✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range:		
	a. VOA Fraction _____		
	b. B/N Fraction _____		
	c. Acid Fraction _____		
	d. Pesticides/PCB's _____		
	e. Other _____		
	If not met, were the calculations checked and the results qualified as "estimated?"	____	____
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (if applicable)	____	✓
	(If not met, list those compounds and their recoveries which fall outside the acceptable range)		
	a. VOA Fraction _____		
	b. B/N Fraction _____		
	c. Acid Fraction _____		
	d. Pesticides/PCB's _____		
	e. Other _____		
7.	Retention Time Shift Meet Criteria (if applicable)		—NA—

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT (CONTINUED)

	NO	YES
8. Extraction Holding Time Met	—	NA —

If not met, list number of days exceeded for each sample: _____

9. Analysis Holding Time Met	___	✓

If not met, list number of days exceeded for each sample: _____

Additional Comments: _____

Laboratory Manager: Matthew A Cadora Date: 7/17/95

Volatile Aromatic Compounds
*40 Code of Federal Regulations
**Method 602

* Indicates reference.
** Indicates method.

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330
JULY 11, 1995

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

COMPLIANCE MONITORING FOR VOLATILE ORGANICS METHOD 602
PID Detector, 4 component trap, xylenes not required for compliance
Compounds reported in micrograms/liter (parts/billion)

Lab Number: 214854
Client: VECTRE CORPORATION
Sample source: RCI-V3
Sample ID: TB
Sample date: 06/30/95
Sampled by: Customer
At lab date: 06/30/95
Matrix: WATER
Instrument: GC 9000

Analysis Date: 07/10/95 Column: RTX-502.2
Dilution Factor: 1

Init Sample vol= 5ml Final volume= 5ml

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Benzene	U	U	1.0	0.3
Toluene	U	U	1.0	0.3
Ethylbenzene	U	U	1.0	0.3
m+p-Xylene	U	U	1.0	0.5
o-Xylene	U	U	1.0	0.4

ug/l = micrograms/liter or ppb

U: Indicates a compound was analyzed for but not detected at the MDL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

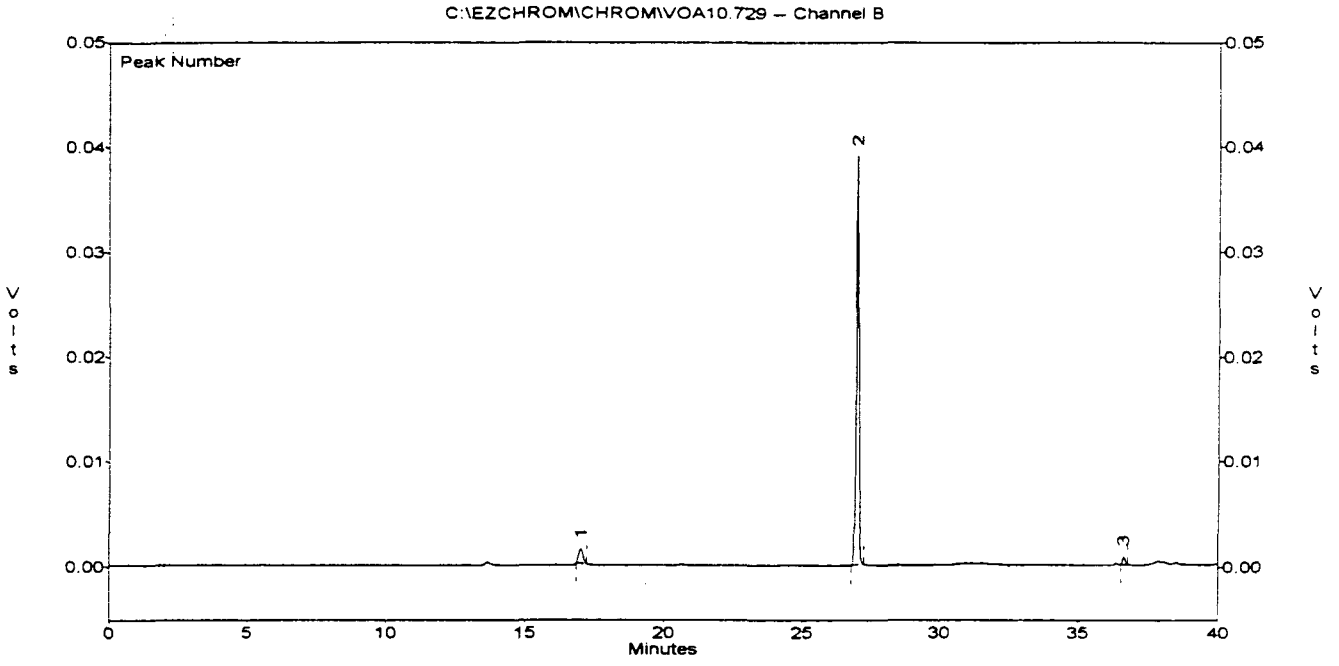
ND: Not Determined.

NEK
DW 7/11/95

8428910406

Method ~~8020~~ 602
Rx (105 m x 0,53 mm)
35 (10 min) to 220 (5 min) at 4/min
File : C:\EZCHROM\CHROM\VOA10.729
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : 214854
Acquired : Jul 10, 1995 17:28:51

PID DETECTOR



Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
1	17.020	16013	t-butylmethylether	~~0.846~~ cmc	1405
--	24.670	0	benzene	0.000	0
2	27.007	288969	a,a,a (602 surr.)	105.080	38960
--	31.100	0	toluene	0.000	0
--	36.370	0	ethylbenzene	0.000	0
3	36.643	5069	m&p-xylene	~~0.195~~ cmc	825
--	38.180	0	o-xylene	0.000	0

8428910407

SW

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330
JULY 11, 1995

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

COMPLIANCE MONITORING FOR VOLATILE ORGANICS METHOD 602
PID Detector, 4 component trap, xylenes not required for compliance
Compounds reported in micrograms/liter (parts/billion)

Lab Number: 214855
Client: VECTRE CORPORATION
Sample source: RCI-V3
Sample ID: FB
Sample date: 06/30/95
Sampled by: Customer
At lab date: 06/30/95
Matrix: WATER
Instrument: GC 9000

Analysis Date: 07/10/95 Column: RTX-502.2
Dilution Factor: 1

Init Sample vol= 5ml Final volume= 5ml

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Benzene	U	U	1.0	0.3
Toluene	2	U	1.0	0.3
Ethylbenzene	U	U	1.0	0.3
m+p-Xylene	1	U	1.0	0.5
o-Xylene	0.5	U	1.0	0.4

ug/l = micrograms/liter or ppb

U: Indicates a compound was analyzed for but not detected at the MDL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

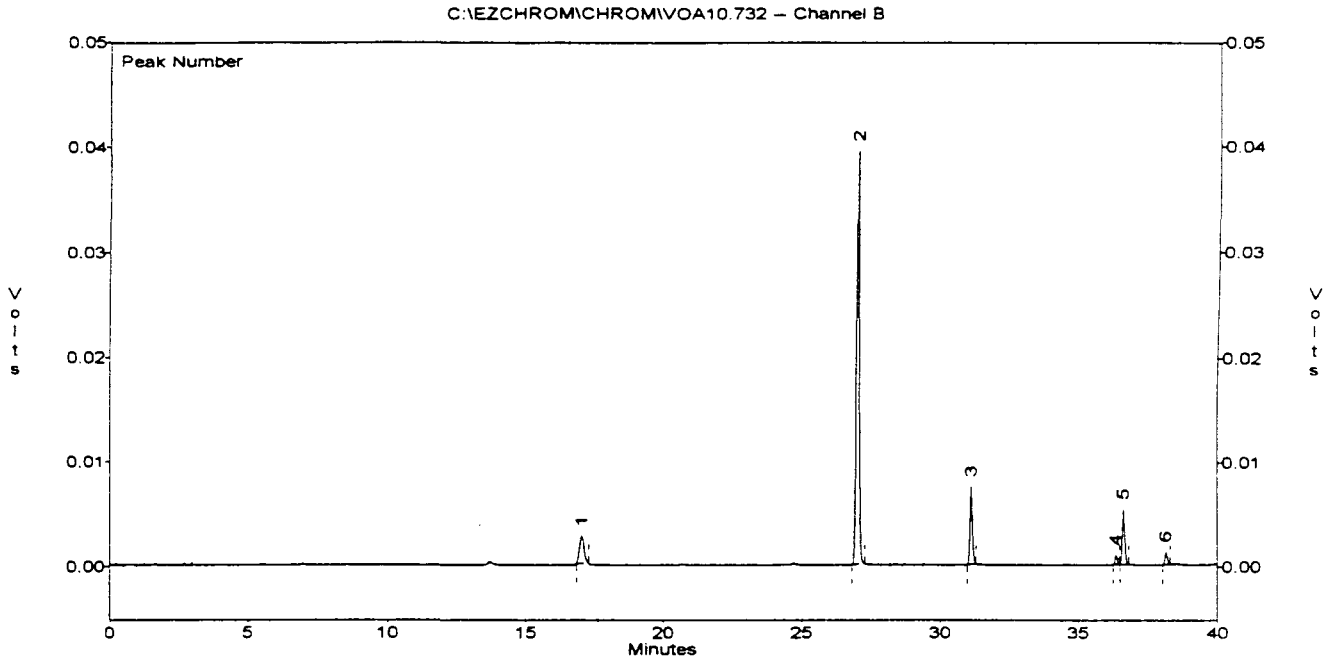
ND: Not Determined.

NEK

7/11/95

8428910408

Method ~~8020~~ 602 PID DETECTOR
Rx (105 m x 0,53 mm)
35 (10 min) to 220 (5 min) at 4/min
File : C:\EZCHROM\CHROM\VOA10.732
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : 214855 — VI
Acquired : Jul 10, 1995 20:30:38



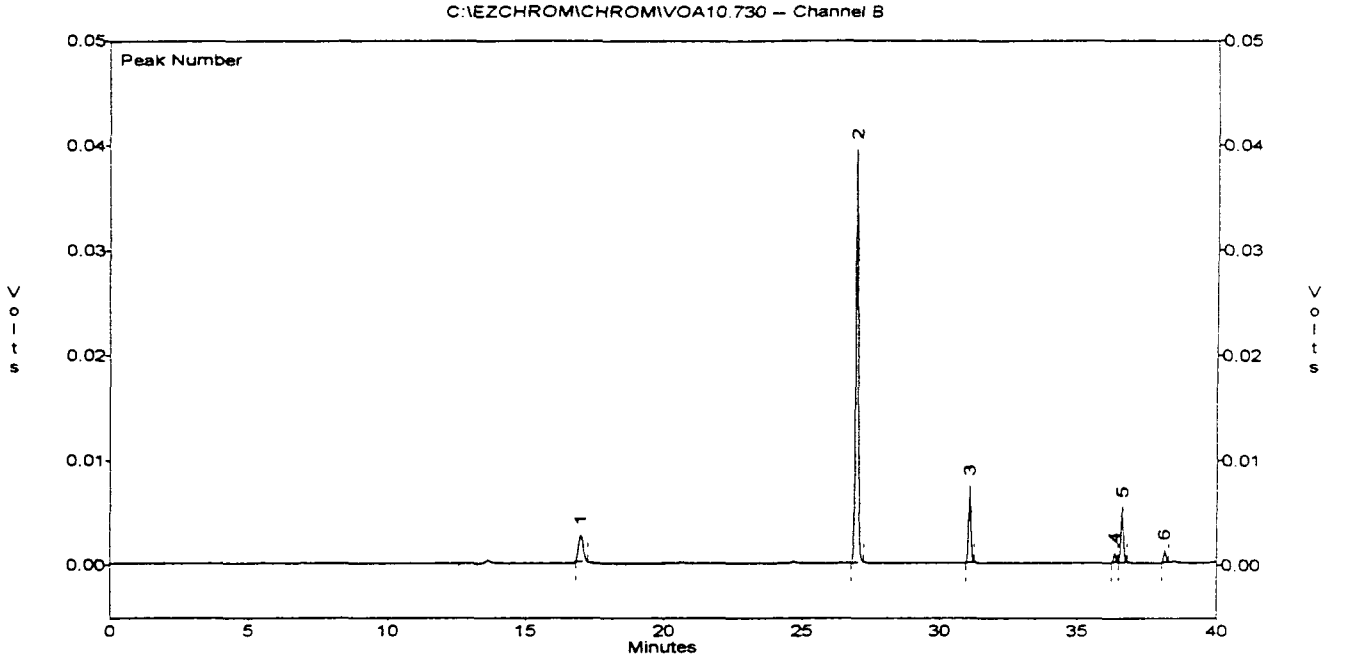
Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
1	17.047	31791	t-butylmethylether	~~1.680~~ NT	2652
--	24.670	0	benzene	0.000	0
2	27.027	290962	a,a,a (602 surr.)	105.805	39338
3	31.137	46018	toluene	1.987	7533
4	36.377	5211	ethylbenzene	~~0.235~~ cmol	898
5	36.643	31891	m&p-xylene	1.225	5342
6	38.167	7806	o-xylene	~~0.496~~ cmol OK	1265
7	40.817	2912		0.000	590
8	40.950	1068		0.000	251
9	41.470	1496		0.000	340
10	41.737	4255		0.000	1179
11	42.680	1245		0.000	344
12	43.313	1914		0.000	327

8428910409

SW

Method ~~8020~~ 602 PID DETECTOR
Rx (105 m x 0,53 mm)
35 (10 min) to 220 (5 min) at 4/min
File : C:\EZCHROM\CHROM\VOA10.730
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : 214855 – ~~V2~~
Acquired : Jul 10, 1995 18:23:17



Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
1	17.017	31281	t-butylmethylether	~~1.653~~ NT	2587
--	24.670	0	benzene	0.000	0
2	27.007	290687	a,a,a (602 surr.)	105.704	39373
3	31.120	45188	toluene	1.952	7367
4	36.360	5468	ethylbenzene	~~0.246~~ <mol	929
5	36.633	31937	m&p-xylene	1.226	5325
6	38.153	7292	o-xylene	~~0.464~~ mol OK	1213
7	40.800	2408		0.000	527
8	41.453	1219		0.000	300
9	41.720	3989		0.000	1153
10	42.667	1078		0.000	298
11	43.293	1132		0.000	306

8428910410

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330
JULY 11, 1995

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

COMPLIANCE MONITORING FOR VOLATILE ORGANICS METHOD 602
PID Detector, 4 component trap, xylenes not required for compliance
Compounds reported in micrograms/liter (parts/billion)

Lab Number: 214856
Client: VECTRE CORPORATION
Sample source: RCI-V3
Sample ID: MW-1
Sample date: 06/30/95
Sampled by: Customer
At lab date: 06/30/95
Matrix: WATER
Instrument: GC 9000

Analysis Date: 07/10/95 Column: RTX-502.2
Dilution Factor: 10

Init Sample vol= 0.5ml Final volume= 5ml

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Benzene	120	U	10	3.0
Toluene	38	U	10	3.0
Ethylbenzene	6600	U	10	3.0
m+p-Xylene	17000	U	10	5.0
o-Xylene	1500	U	10	4.0

ug/l = micrograms/liter or ppb

U: Indicates a compound was analyzed for but not detected at the MDL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

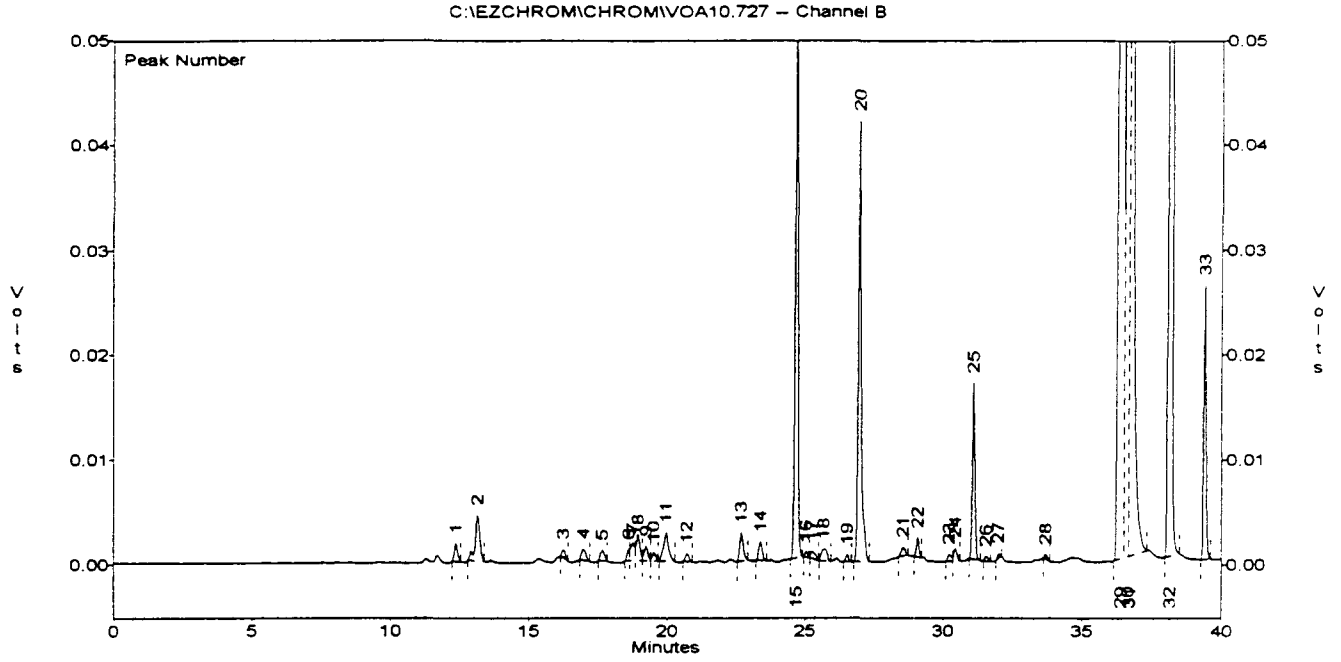
ND: Not Determined.

LIS

7/11/95

Method ~~8020~~ 602
Rx (105 m x 0,53 mm)
35 (10 min) to 220 (5 min) at 4/min
File : C:\EZCHROM\CHROM\VOA10.727
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : 214856-0.5
Acquired : Jul 10, 1995 15:15:58

PID DETECTOR



Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
1	12.390	15585		0.000	1763
2	13.180	51536		0.000	4423
3	16.263	6307		0.000	777
4	16.997	11552	t-butylmethylether	~~0.610~~	1065
5	17.677	10027		0.000	1046
6	18.630	6677		0.000	1047
7	18.787	16495		0.000	1692
8	18.970	24347		0.000	2545
9	19.260	13821		0.000	1415
10	19.547	7194		0.000	857
11	19.993	36210		0.000	2733
12	20.760	7683		0.000	809
13	22.727	23172		0.000	2696
14	23.417	16457		0.000	1792
15	24.697	389228	benzene	12.431	54063
16	25.067	3420		0.000	541
17	25.287	7868		0.000	733
18	25.697	16484		0.000	1146
19	26.543	5142		0.000	665
20	26.987	340815	a,a,a (602 surr.)	123.933	42045
21	28.580	8057		0.000	842
22	29.100	12722		0.000	1829
23	30.240	6339		0.000	688
24	30.453	9462		0.000	1269
25	31.113	103841	toluene	3.825	16866

Continued...

8428910412

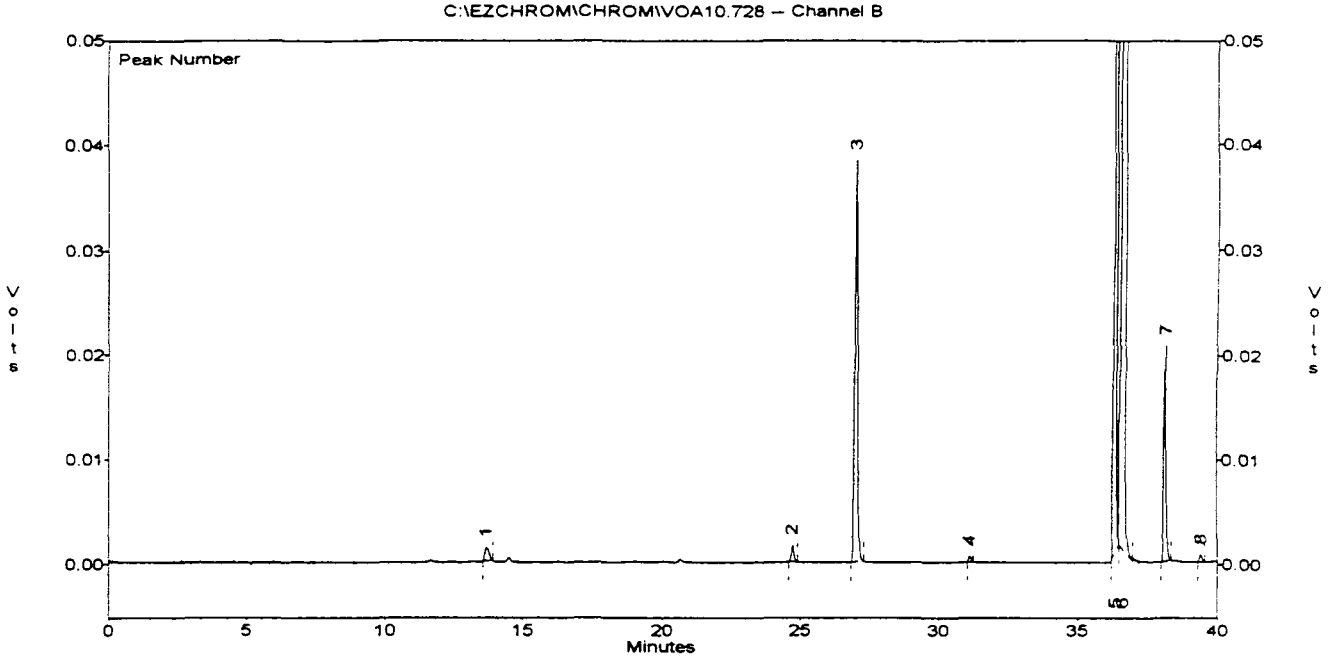
File : C:\EZCHROM\CHROM\VOA10.727
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : 214856-0.5
Acquired : Jul 10, 1995 15:15:58

Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
26	31.563	3652		0.000	490
27	32.013	2982		0.000	472
28	33.700	3088		0.000	446
29	36.420	10329714	ethylbenzene	518.451	1103674
30	36.687	7746438		0.000	1103297
31	36.747	6221454	m&p-xylene	196.673	1103539
32	38.163	3643862	o-xylene	179.581	577567
33	39.423	159057		0.000	26155
34	40.577	287036		0.000	73310
35	40.800	1183660		0.000	248007
36	40.930	819965		0.000	208839
37	41.457	298304		0.000	85768
38	41.727	2191395		0.000	608939
39	41.947	12642		0.000	2639
40	42.080	14780		0.000	3678
41	42.250	26285		0.000	7190
42	42.340	14786		0.000	4053
43	42.667	740639		0.000	206374
44	42.797	7307		0.000	2105
45	42.977	115838		0.000	33689
46	43.120	196076		0.000	43210
47	43.300	460874		0.000	128489
48	43.500	32836		0.000	8652
49	43.677	199651		0.000	28121
50	43.903	168188		0.000	47551
51	44.173	51241		0.000	8750
52	44.357	75818		0.000	18304
53	44.660	193095		0.000	38256
54	44.813	239033		0.000	63684

Method ~~8020~~ 602
Rx (105 m x 0,53 mm)
35 (10 min) to 220 (5 min) at 4/min
File : C:\EZCHROM\CHROM\VOA10.728
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : 214856-0.02
Acquired : Jul 10, 1995 16:21:22

PID DETECTOR

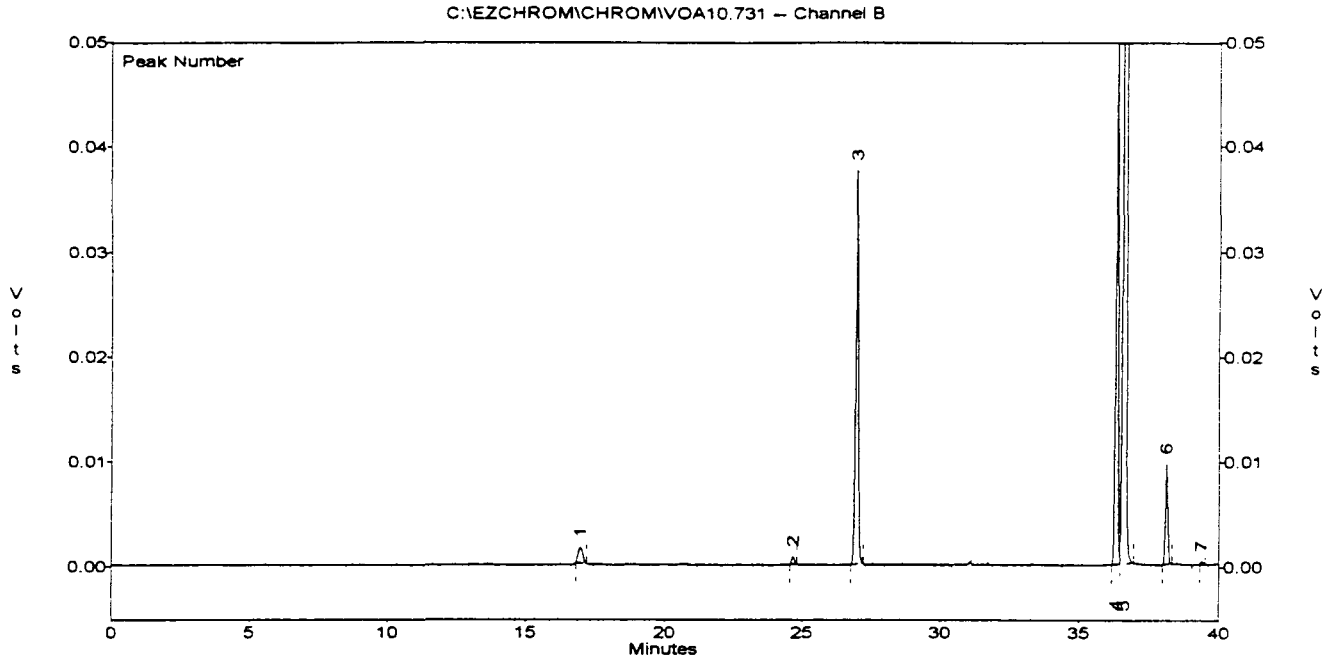


Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
1	13.697	14546		0.000	1325
--	16.950	0	t-butylmethylether	0.000	0
2	24.753	11290	benzene	0.474	1569
3	27.033	283033	a,a,a (602 surr.)	102.921	38361
4	31.137	3687	toluene	0.159	616
5	36.360	618892	ethylbenzene	26.262	106839
6	36.640	2351529	m&p-xylene	72.717	384174
7	38.157	123920	o-Xylene	5.847	20716
8	39.427	4626		0.000	731
9	40.577	8246		0.000	2007
10	40.797	35590		0.000	7453
11	40.930	29624		0.000	6436
12	41.463	9359		0.000	2436
13	41.730	75386		0.000	22051
14	42.677	24771		0.000	6332
15	42.993	3627		0.000	1008
16	43.133	6146		0.000	1339
17	43.313	13188		0.000	3823
18	43.757	6701		0.000	916
19	43.920	5393		0.000	1418
20	44.377	1956		0.000	530
21	44.683	6106		0.000	1182

8428910414

Method ~~8020~~ 602 PID DETECTOR
Rx (105 m x 0,53 mm)
35 (10 min) to 220 (5 min) at 4/min
File : C:\EZCHROM\CHROM\VOA10.731
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : 214856-0.01
Acquired : Jul 10, 1995 19:26:51



Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
1	16.993	16864	t-butylmethylether	0.891	1482
2	24.697	5299	benzene	0.223	764
3	26.987	276252	a,a,a (602 surr.)	100.455	37525
--	31.100	0	toluene	0.000	0
4	36.337	293791	ethylbenzene	9.866	49753
5	36.617	1168853	m&p-xylene	34.835	193464
6	38.137	57439	o-xylene	3.081	9594
7	39.403	1898		0.000	320
8	40.563	3649		0.000	885
9	40.783	15140		0.000	3169
10	40.917	10465		0.000	2648
11	41.443	4917		0.000	1204
12	41.710	33217		0.000	9466
13	42.653	10315		0.000	2764
14	42.970	1326		0.000	364
15	43.107	3042		0.000	573
16	43.283	6438		0.000	1773
17	43.663	2357		0.000	330
18	43.897	2587		0.000	622
19	44.653	2308		0.000	461
20	44.810	3423		0.000	858

SW

8428910415

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330
JULY 11, 1995

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

GC VOA METHOD BLANK SUMMARY
GC 602

Batch #:	QV0398	Matrix:	AQUEOUS
		Weight/Volume:	5ml
Analysis date:	07/10/95	Dilution Factor:	1
Column used:	RTX-502.2	Final Volume:	5ml
Primary		Instrument:	GC 9000

ANALYTE NAME	RESULT UG/L	PQL UG/L	MDL UG/L
Benzene	U	1.0	0.3
Toluene	U	1.0	0.3
Ethylbenzene	U	1.0	0.3
m+p-Xylene	U	1.0	0.5
o-Xylene	U	1.0	0.4

U: Indicates a compound was analyzed for but not detected.
ND: Not determined.

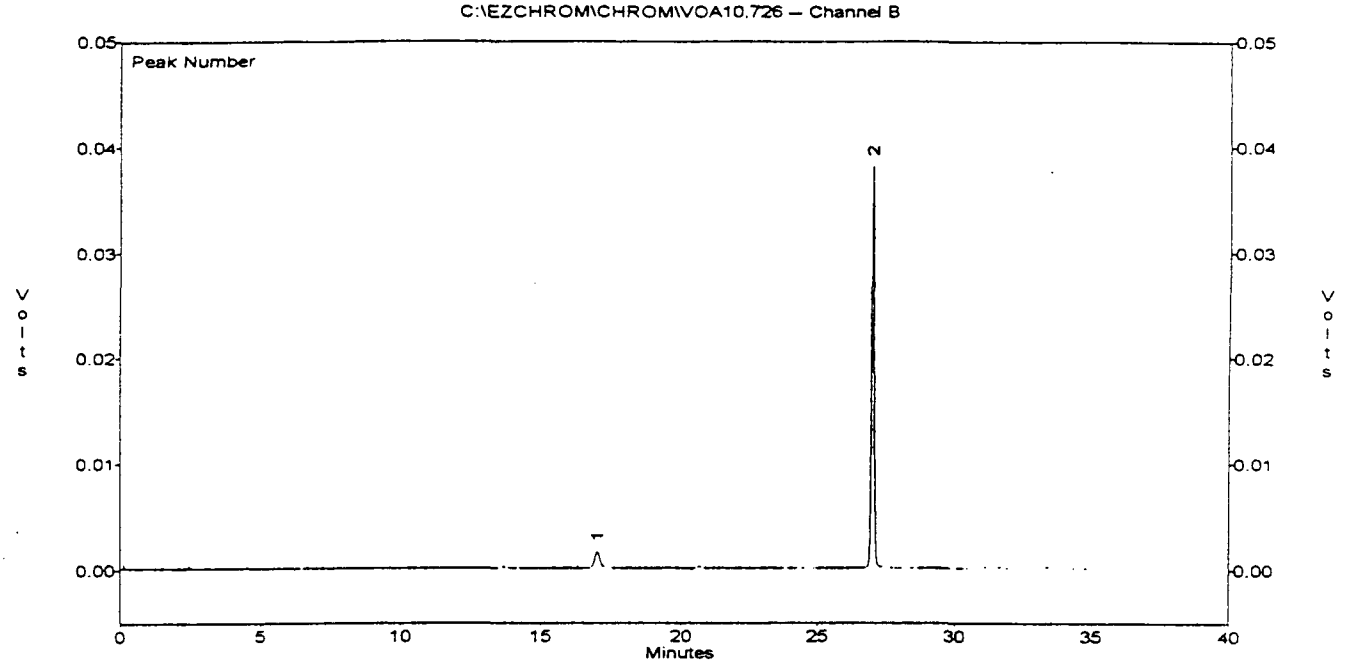
Associated Samples

214854 214855 214856 214907 S

LIS

Method ~~8020~~ 602
Rx (105 m x 0,53 mm)
35 (10 min) to 220 (5 min) at 4/min
File : C:\EZCHROM\CHROM\VOA10.726
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : BLANK
Acquired : Jul 10, 1995 14:10:46

PID DETECTOR



Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
1	17.037	15927	t-butylmethylether	0.842 ~~ppb~~ mDL	1386
--	24.670	0	benzene	0.000	0
2	27.017	279411	a,a,a (602 surr.)	101.604	37913
--	31.100	0	toluene	0.000	0
--	36.370	0	ethylbenzene	0.000	0
--	36.620	0	m&p-xylene	0.000	0
--	38.180	0	o-xylene	0.000	0
3	42.100	1873		0.000	439
4	42.360	2614		0.000	518
5	42.553	1525		0.000	316
6	42.763	2467		0.000	478
7	43.167	3824		0.000	618

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330
JULY 11, 1995

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

GC VOLATILE CALIBRATION SUMMARY
GC 602

INSTRUMENT ID: GC 9000 BATCH #: QV0398

GC COLUMN USED: RTX-502.2

PRIMARY: _X_ CONFIRMATION: ___

ANALYTE NAME	INITIAL CALIBRATION FACTOR	CONTINUING CALIBRATION FACTOR	%D	RT WINDOWS	ANALYSIS DATE	ANALYSIS TIME
Benzene	31177	26447	15	24.52-24.82	07/10/95	13:12
Toluene	29352	25708	12	30.95-31.25	07/10/95	13:12
Ethylbenzene	24899	24267	3	36.19-36.49	07/10/95	13:12
m+p-Xylene	33469	30239	10	36.47-36.77	07/10/95	13:12
o-Xylene	21279	21140	1	38.03-38.33	07/10/95	13:12

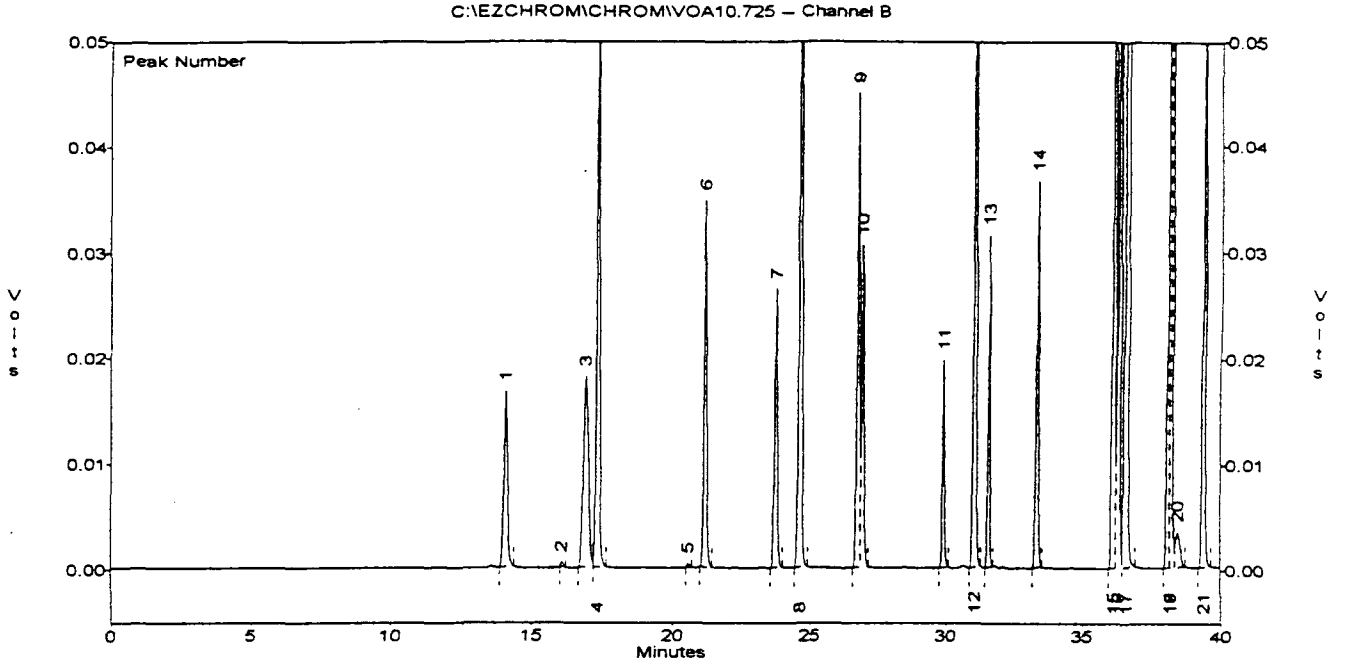
Calibration Factor = Integrated Area/Concentration (pg inj)

Associated field, QC and method blanks:

214854 214855 214856 214907 S BLANK

PID DETECTOR

Method ~~8020~~ 602
Rx (105 m x 0,53 mm)
35 (10 min) to 220 (5 min) at 4/min
File : C:\EZCHROM\CHROM\VOA10.725
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : QC 20
Acquired : Jul 10, 1995 13:12:47



Channel B Results

verified for curve run 7/3/95 - 7/4/95 21:33 - 00:54

Pkno	Ret. Time	Area	Name	ESTD	Height
1	14.103	151689		0.000	16618
2	16.100	2977		0.000	449
3	16.947	226317	t-butylmethylether	17.690	18054
4	17.370	395482		0.000	56887
5	20.593	2196		0.000	339
6	21.213	238256		0.000	34737
7	23.797	188670		0.000	26385
8	24.673	528943	benzene	16.966	74469
9	26.793	285508		0.000	44858
10	26.973	226151	a,a,a (602 surr.)	82.237	30473
11	29.943	110982		0.000	19636
12	31.100	514161	toluene	17.517	84677
13	31.620	160690		0.000	31384
14	33.377	224739		0.000	36468
15	36.153	575576		0.000	103963
16	36.340	485331	ethylbenzene	19.492	77133
17	36.617	1209552	m&p-xylene	36.139	202725
18	38.180	422796	o-xylene	19.869	92934
19	38.233	735502		0.000	125813
20	38.497	39205		0.000	3338
21	39.413	388371		0.000	59551
22	40.713	452608		0.000	112696
23	40.800	686908		0.000	167889
24	41.103	1277206		0.000	226941
25	41.230	620300		0.000	174441

Continued...

F
File : C:\EZCHROM\CHROM\VOA10.725
Method : C:\EZCHROM\METHODS\BTEX.MET
Sample ID : QC 20
Acquired : Jul 10, 1995 13:12:47

Channel B Results

Pkno	Ret. Time	Area	Name	ESTD	Height
26	41.627	3594		0.000	1044
27	41.830	366312		0.000	102740
28	41.900	602463		0.000	166115
29	42.263	409515		0.000	109159
30	42.527	417365		0.000	121187
31	42.720	546338		0.000	159179
32	42.923	578323		0.000	172192
33	43.333	446492		0.000	126089
34	43.660	450806		0.000	126311

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
JULY 11, 1995

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

GC SURROGATE RECOVERY SUMMARY
Aqueous Volatile

Batch number: QV0398

Sample Number	Data File	% Recovery aaa-T	# Outside QC Limits
BLANK	726	102	0
214856-0.5	727	124	0
214856-0.02	728	103	0
214854	729	105	0
214855	730	106	0
214856-0.01	731	100	0
214855	732	106	0
214907 S	736	113	0

	Compound	Percent Recovery	Concentration Added
QC Limits:	aaa-Trifluorotoluene:	72-128	30ppb

* Values outside QC Limits.
** Surrogates are diluted out.

S= Spike sample
SD= Spike duplicate sample
DL= Dilution
RE= Indicates a reanalysis of the sample confirming matrix interference.
NA= Not Applicable

LIS

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
JULY 11, 1995

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA Historic CLP Lab

QUALITY ASSURANCE DATA
MATRIX SPIKE RECOVERY
GC METHOD 602 - WATER

			Sample	MS
Spiked sample:	214907	Initial wt/vol:	5	5
QC Batch number:	QV0398	Final vol:	5	5

For samples: 214854 214855 214856

Compound	Conc Added ug/L	Samp Conc ug/L	Conc MS ug/L	% Rec	Limits Recovery
Benzene	20.0	U	19.6	98	39-150
Toluene	20.0	U	20.1	100	46-148
Ethylbenzene	20.0	U	20.8	104	32-160
m+p-Xylene	40.0	U	40.5	101	32-160
o-Xylene	20.0	U	23.1	116	55-135

* Values are outside QC Limits
** Spike recovery does not meet quality control limits due to a high concentration of this parameter in the spiked sample.
\# Sample spike outside of QC limits, so Blank spike is reported.
ND = Not determined.

Recovery: 0 out of 5 are outside QC limits.

LIS

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION - BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS # C-92-3205 **UST #** 0226253

Reichhold Chemicals
46 Albert Ave.
Newark NJ

(Essex)

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et seq.:

REMOVAL OF: one 3,000 gallon #2 Fuel/Heating Oil UST(s), and appurtenant piping.

SITE ASSESSMENT: Soil samples will be taken every five (5) feet along the center line of each tank and one (1) soil sample for every 15 feet along all associated piping. Two (2) additional samples will be taken per tank and biased to the areas of highest field screened readings. Samples will be analyzed for TPHC. If any results are higher than 1000 ppm then analyze 25% of the samples for VO+10.

ON-SITE MANAGER: Rob Naujelis **TELEPHONE:** (201)589-3714

OWNER: **TELEPHONE:**

EFFECTIVE DATE: Sept 15, 1992

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.

Michael S Kelly (for)

8428910423

KEVIN F. KRATINA, ACTING BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION -
BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS # C-92-3206 **UST #** 0226253

Reichhold Chemicals
46 Albert Ave.
Newark NJ

(Essex)

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et seq.:

Abandoment In Place Of: one 500 gallon V,M&P Naptha and one 500 gallon Mineral Spirits UST(s) and associated piping.

SITE ASSESSMENT: Three (3) soil samples will be taken from each tank and one (1) sample every 15 feet along all appurtenant piping. Samples will be analyzed for VO+10, Napthalene, and B/N+15.

Rob Naujelis — **ON-SITE MANAGER:**

(201)589-3714 — **TELEPHONE:**

OWNER:

TELEPHONE:

Sept 15, 1992 — **EFFECTIVE DATE:**

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.

8428910424

Michael S Kelly (for)

KEVIN F. KRATINA, ACTING BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION -
BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS # C-92-3204 **UST #** 0226253

Reichhold Chemicals
46 Albert Ave.
Newark NJ

(Essex)

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et seq.:

REMOVAL OF: two 500 gallon gasoline UST(s), one 500 gallon diesel UST(s), and associated piping.

SITE ASSESSMENT: Soil samples will be taken every five (5) feet along the centerline of each tank and one sample every 15 feet along all appurtenant piping. Two (2) additional samples will be taken per tank and biased to the areas of highest field screened readings. Samples associated with the gasoline UST(s) will be analyzed for VO+10 and lead(if necessary). Samples associated with the diesel and/or oil UST(s) will be analyzed for TPHC. If any samples are higher than 1,000ppm then analyze 25% of the samples for VO+10.

ON-SITE MANAGER: Rob Naujelis **TELEPHONE:** (201)589-3714

OWNER: **TELEPHONE:**

EFFECTIVE DATE: Sept 15, 1992

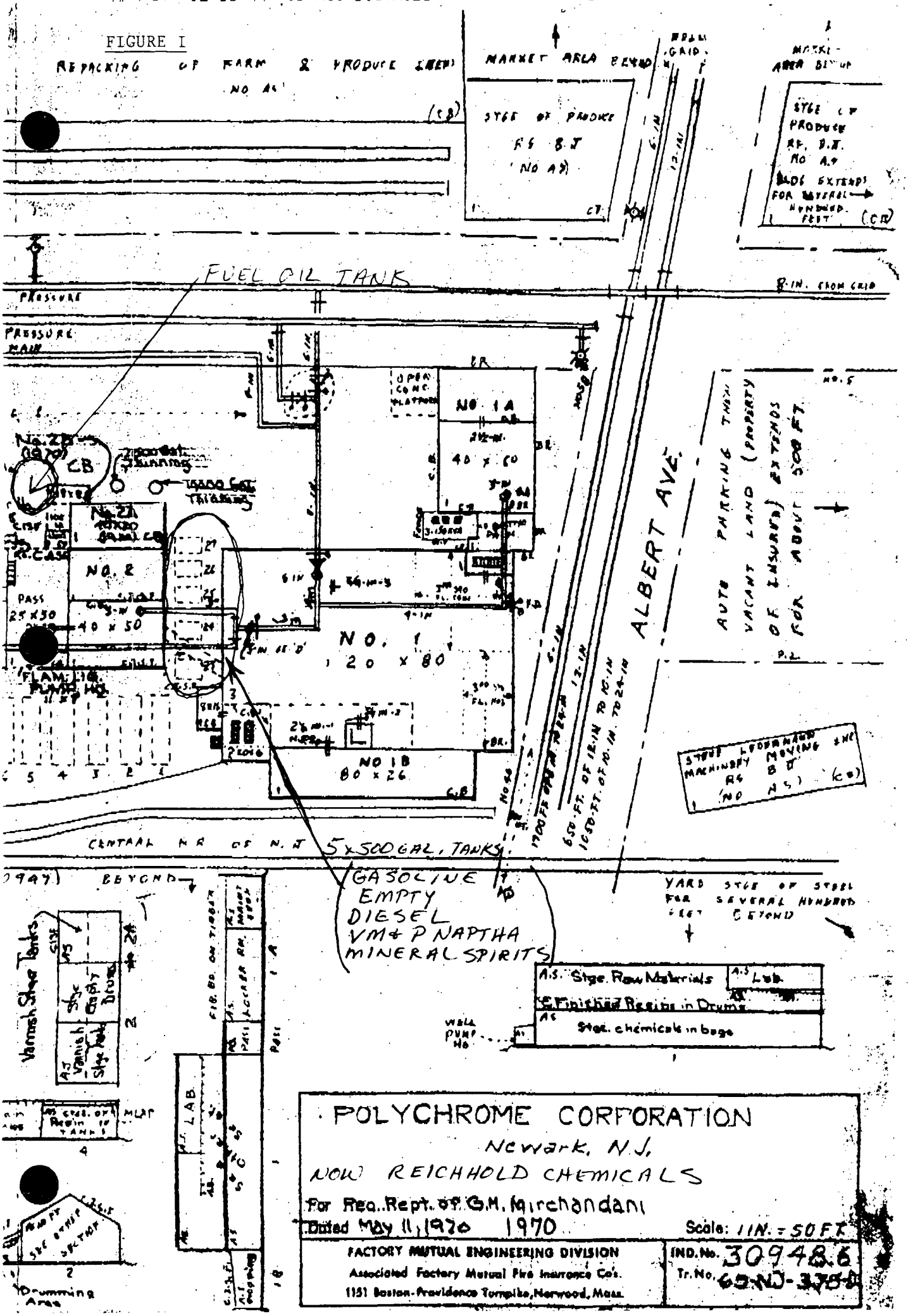
THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.

Michael S Kelly (For)

8428910425

KEVIN F. KRATINA, ACTING BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

FIGURE I



POLYCHROME CORPORATION

Newark, N.J.

NOW REICHHOLD CHEMICALS

For Rea. Rept. of G.M. Nirchandani

Dated May 11, 1970 1970

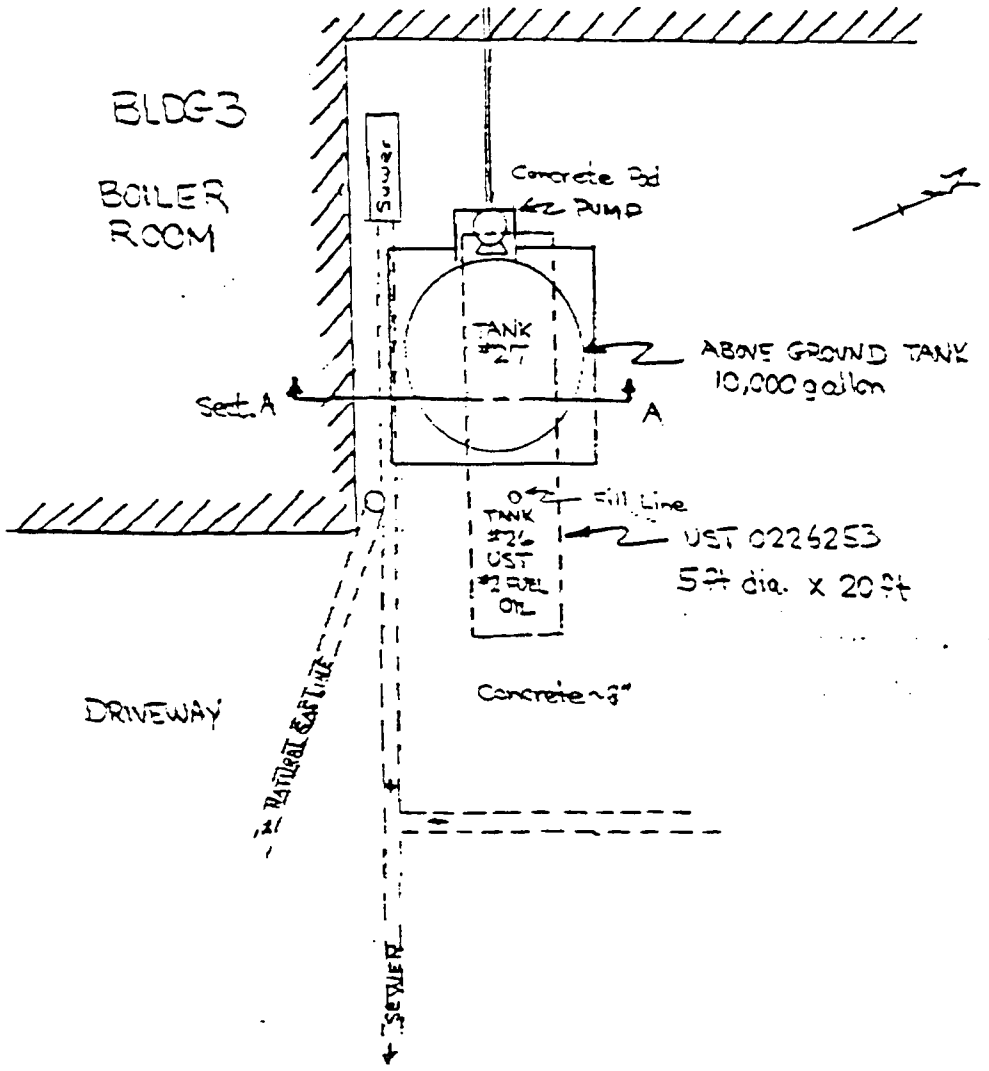
Scale: 1 IN. = 50 FT.

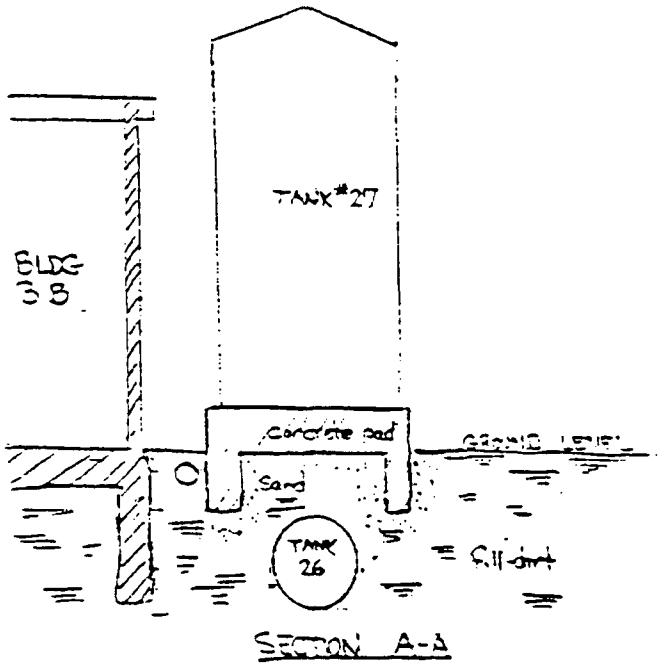
FACTORY MUTUAL ENGINEERING DIVISION
Associated Factory Mutual Fire Insurance Cos.
1151 Boston-Providence Turnpike, Norwood, Mass.

IND. No. 30948.6

Tr. No. 69-NJ-3784

FIGURE 2





SECTION A-A

8428910427

REICHHOLD CHEMICALS, INC.
46 Albert Ave.
Newark NJ 07105
SCALE 1" = 10' 5/26/90

8428910428

REACH ASSOCIATES INC.
ENGINEERS / CONSULTANTS

Certified Mail
Return Receipt Requested

July 30, 1990

NJ Dept. of Environmental Protection
Division of Water Resources
CN-029
Trenton, New Jersey 08625

ATTN: BUST Program

Re: Reichhold Chemicals, Inc.
46 Albert Avenue
Newark, NJ
UST # 0226253

Dear Sir or Madam:

Reichhold Chemicals, Inc. filed a Standard Reporting Form dated February 23, 1990 for the removal of an Underground Storage Tank registered as Tank E1.

The tank is located underneath a 10,000 gallon aboveground storage tank (See Figure 1). The UST would be extremely difficult to remove because of its inaccessibility. In addition, removal of the UST would cause damage to the other tank.

It is proposed to abandon Tank E1 in place by cleaning and filling it with an inert material following the procedures attached.

A revised Standard Reporting Form and Site Assessment Compliance Statement for these activities is attached.

Should you have any questions or require additional information please contact Reach Associates, Inc. at 201-763-2877.

Very truly yours,

Melvin Wolkstein, PE
NJ License No. 16866
Reach Associates, Inc.
Consulting Engineers for
Reichhold Chemicals, Inc.

MW/vc
Attachment

cc: Joseph Pointek, Reichhold

Let's protect our earth

For State Use Only	
Date Rec'd.	
Auth	
Routing	
UST NO.	

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625
ATTN: BUST Program
(609) 984-3156

STANDARD REPORTING FORM
for the:
Installation / (Abandon) / Remove / Sale-Transfer / Substantial Modification
Circle Only One — Use One Form Per Activity

(More than one tank can be listed per tank activity)

Answer questions 1 through 5 and others as applicable.

1. Company name and address: (as it appears on registration questionnaire)

Reichhold Chemicals, Inc.
46 Albert Avenue
Newark, NJ 07105

2. Facility name and location: (if different from above)

3. Contact person for this activity: Mikulas Gasparik

Telephone Number: (201) 589-3875

4. The identification number of the affected tank as it appears in Question Number 12 on the Registration Questionnaire:

E1

5. Registration Number (if known): UST - 0226253

(OVER)

8428910429

6. For TRANSFER OF OWNERSHIP:

New Company Name _____

New Facility Name _____

Address _____

_____

New owner/operator (print) _____

Signature _____

7. For ABANDONMENT or REMOVAL:

a. Describe the proposed procedure in detail on an attached sheet. See Attached

b. Specify the product last stored in the tank: Fuel Oil No. 2

c. Date abandoned or removed ASAP

d. Is a Site Assessment Compliance Statement being completed? (YES) or NO Form MUST be completed and returned within 90 days of tank closure. (per 40 CFR 280.72)

8. For SUBSTANTIAL MODIFICATIONS:

a. Describe the reason for the modification and, in detail, the proposed procedure to be used on an attached sheet.

b. Specify the product presently stored in the tank: _____

c. Specify the product to be stored in the tank: _____

9. For NEW OR REPLACEMENT INSTALLATIONS:

a. Attach the specifications as required by the attached instructions.

b. Specify the product (s) to be stored in the tank: _____

NOTE: All appropriate and applicable permis, licenses and certificates from any local, state and/or federal agency must be obtained separately from this notification as required by the above stated activity.

CERTIFICATION

**** This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for that facility. (7:14B-2.3 (a) 1). ****

"I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisionment."

Signature: _____

Name (print or type): Mikulas Gasparik

Title: Plant Manager Date: 7/31/90

- (12/87)

8428910430

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Underground Storage Tanks
CN-029, Trenton, NJ 08625

For State Use Only
Date Rec'd
Auth
Routing
UST NO.

SITE ASSESSMENT COMPLIANCE STATEMENT

Supplement to the New Jersey Standard Reporting Form
(Complete for ALL regulated UST abandonments or removals)

Within ninety (90) days of completing the UST closure of any State or Federally-regulated tank, the owner or operator must submit this completed form to the NJDEP Bureau of Underground Storage Tanks. If the facility is located in one of the counties listed on the back, a copy of this form must also be sent to the Health Agency indicated.

The owner or operator of any Federally-regulated tank must also comply with the following:

40 CFR Part 280.72 Assessing the site at closure or change-in-service

"(a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release."

FACILITY Reichhold Chemicals, Inc. **UST #** 0226253

Check off the following items as appropriate for the site.

X The UST facility is only regulated by State law, therefore a site assessment is not mandatory.

____ The UST facility is regulated by Federal law and a site assessment was conducted.

The results of the site assessment indicate:

____ There was NO release from the UST system.

____ There was a release from the UST system and it was reported to the DEP Environmental Hotline (609-292-7172).

NOTE: The results of the site assessment are not to be submitted to the DEP or Health Agency unless requested to do so. The results are to be available for inspection at the UST facility.

Questions can be directed to the Bureau at (609) 984-3156.

*** This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for that facility (7:14B-2.3 (a) 1). ***

I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment.

SACS-2,1/89

(Signature) Date 7/31/90

Mikulas Gasparik
(Print or Type Name)

Plant Manager
(Title)

8428910431

UNDERGROUND STORAGE TANK
PROCEDURE FOR ABANDONMENT

PREPARED BY

REACH ASSOCIATES, INC.

WORK COMPLETED

1.0 Tank Area Preparation

Reichhold has cut and removed concrete pad from above the tank and excavated soil to the top of the tank. The excavated soil was set on impervious plastic sheeting. Compressed air tools were used to cut a manway access into the tank.

WORK TO BE DONE

2.0 Clean Tank

2.1 With the use of EPA/DOT approved vacuum truck, the entire tank contents will be pumped out. Tank contents are #2 heating oil and associated sludges.

2.2 Tank will be rinsed thoroughly or hand wiped clean.

2.3 All liquid waste material will be transported and disposed of at a State authorized Transport, Storage, and Disposal Facility as required by law. Proper documentation in the form of a Hazardous Waste Manifest form will be used as required by law.

3.0 Add Inert Fill Material

3.1 An inert "flowable" material will be introduced in multiple layers to completely fill the tank. The material used shall meet NJDEP and local code requirements.

4.0 Control Of Vapors During Filling

4.1 A venting device will be attached to the vent pipe to remove vapors from the area during the application of the inert material.

5.0 Closure of Fill and Vent Lines

5.1 The fill and vent lines will be removed at ground surface level. The pipe lines will be filled and sealed with concrete or similar material to render them unusable.

6.0 Site Assessment

6.1 Removal of the underground tank is not feasible. The tank is set underground beneath the foundation of an aboveground 10,000 gal tank (See Figure 1). Removal of the underground tank would require demolishing of the aboveground tank and foundation.

6.2 In order to determine if a discharge or contamination of the environment has occurred samples will be taken from beneath the tank, at intervals of 5 feet, and from both sides of the tank. The samples will be taken by cutting through the tank shell.

If soil contamination is evident during soil excavation or sampling the NJDEP will be notified immediately.

Reichhold Chemicals, Inc.
Coating Polymers & Resins Division
46 Albert Avenue
Newark, New Jersey 07105

CERTIFIED MAIL

REICHHOLD

February 23, 1990

N.J. Department of Environmental Protection
Division of Water Resources
CN-029
Trenton, N.J. 08625

Attn.: BUST Office (R&B Section)

Dear Sir:

Enclosed are completed forms for you to process so we can remove a 3,000 gallon registered UST. This tank was used for #2 fuel oil.

Very truly yours,

Joseph Pointek
Operations Engineer

JP/glm
encl.

(800) 548-5456
TEL. (201) 589-3875
(212) 267-2489
FAX: (201) 589-2898

8428910435

8428910436

TED SLACK ENVIRONMENTAL SERVICES INC.
10 NORTHRIDGE WAY
WARREN, NEW JERSEY 07060
(201) 769-4106
FAX # (201) 769-9515

January 30,1990

Reichhold Chemicals, Inc.
46 Albert Avenue,
Newark, New Jersey 07105 (201)589-3875

Attn: Mr. Joseph Pointek

Re: Ted Slack Proposal No.TS-004: Excavation and Disposal of One (1) 3000 gallon UST.

Dear Mr. Pointek;

Ted Slack Environmental Services is pleased to present the following proposal for your review. The scope of work is based on an inventory of One (1) 3000 gallon UST following complete BUST Standards.

Scope of Work:

I) Tank contents will be pumped dry prior to any excavation. The tank to ~~be~~ removed ~~will be registered (if necessary) at an additional cost of $100.00 and~~ the necessary State filing will be completed. The local Fire Department will be informed of the activities and local permits obtained. The site will be marked off to indicate any possible utility lines. A charge will be assessed if contractor is to perform tank liquid removal, price based on BS&W.

II) A crew with a Jackhammer will demolish all pads, concrete, and asphalt above tank prior to excavation procedures.

III) The tank will be excavated and removed according to API 1604 procedures.

IV) All contaminated soils, concrete, asphalt and debris (if any) will be staged on plastic, on site for disposal.

V) Once the tank is secured above ground a combustible gas meter will be used to determine if the level of combustible gas in the tank is within safe limits to cold cut and clean to Fire Department and Department of Transportation requirements. All solutions and sediment will be disposed of and manifested according to Federal and State guidelines. This is an extra cost item depending on sludge content.

VI) The cleaned tank will then be cut, transported and disposed/scrapped. All scrap yard receipts to be provided as proof of disposal.

VII) The area beneath the tank will be inspected and a site assessment conducted per NJDEP Standards.

IX) The area will be backfilled with 3/4" stone to the water level and #4 Bank Run compacted in 18" lifts to grade, or to grade in preparation of topping.

Costs:

1) The excavation, cutting, cleaning and disposal of tank Bottom sludge (if any) will be drummed for disposal. Providing tank is not under another tank.

2) Certified clean backfill including compaction and grading per ton.

3) Transportation and Disposal of oil contaminated Soils (X725) per ton.

Additional remediation, sampling, or testing will incur additional surcharges.

Extra Charges:

1) Concrete replacement will be at per sq. foot.

2) Paving will be at a rate of per sq. foot.

3) Magnatometer (if necessary) will be per day.

NOTE: In addition to the above prices, there will be a 6% Sales Tax added for the NJ Sales Tax.

Disputes:

Any dispute or disagreement which cannot be resolved by the parties and any controversy, claim or dispute otherwise arising out of or in connection with this agreement, or the breach thereof, or otherwise arising from the project, shall be settled under the rules of the American Arbitration Association. Arbitration proceedings shall be help in Warren, N.J., U.S.A., or such other place as is mutually acceptable to both parties. The award in any arbitration proceeding shall be final and binding upon all parties and judgement thereon may be entered in any court of competent jurisdiction upon application of either of the parties.

Scheduling:

Program can be initiated with Five (5) working days.

Payment Terms:

1/3 Down at start of Job.
1/3 halfway thru.

8428910437

Balance upon completion.

If this proposal is acceptable, please sign and return the signatory sheet attached.

If you have any questions or comments regarding this proposal, please feel free to contact me at (201) 769-4106. Thank you for considering Ted Slack Environmental Services Inc. to assist you in your Environmental needs.

Very Truly Yours,

Theodore P. Slack

Theodore P. Slack
President

TS:lr
TS-004

Let's protect our earth

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Underground Storage Tanks
CN-029, Trenton, NJ 08625

State Use Only
Date Rec'd
Auth
Routing
UST NO.

SITE ASSESSMENT COMPLIANCE STATEMENT

Supplement to the New Jersey Standard Reporting Form
(Complete for ALL regulated UST abandonments or removals)

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The owner or operator of any Federally-regulated tank must also comply with the following:

40 CFR Part 280.72 Assessing the site at closure or change-in-service

"(a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release."

FACILITY REICHHOLD CHEMICALS, INC. UST # 0226253

Check off the following items as appropriate for the site.

X The UST facility is only regulated by State law, therefore a site assessment is not mandatory.

____ The UST facility is regulated by Federal law and a site assessment was conducted.

The results of the site assessment indicate:

____ There was NO release from the UST system.

____ There was a release from the UST system and it was reported to the DEP Environmental Hotline (609-292-7172).

NOTE: The results of the site assessment are not to be submitted to the DEP or Health Agency unless requested to do so. The results are to be available for inspection at the UST facility.

Questions can be directed to the Bureau at (609) 984-3156.

8428910439

*** This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for that facility (7:14B-2.3 (a) 1). ***

I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment.

(SIGNATURE) Date 2/23/9

Mikulas Gasparik
(PRINT OR TYPE NAME)

Plant Manager
(Title)

SACS-2,1/89

Let's protect our earth

For State Use Only	
Date Rec'd.	
Auth	
Routing	
UST NO.	

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

CN 029
TRENTON, NEW JERSEY 08625
ATTN: BUST Program
(609) 984-3156

STANDARD REPORTING FORM
for the:

Installation/Abandon/Remove/Sale-Transfer/Substantial Modification

Circle Only One — Use One Form Per Activity

(More than one tank can be listed per tank activity)

Answer questions 1 through 5 and others as applicable.

1. Company name and address: (as it appears on registration questionnaire)

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, N.J. 07105

2. Facility name and location: (if different from above)

3. Contact person for this activity: MIKULAS GASPARIK

Telephone Number: (201) 589-3875

4. The identification number of the affected tank as it appears in Question Number 12 on the Registration Questionnaire: E1

5. Registration Number (if known): UST - 0226253

8428910440

ATTACHMENT A

QUESTION 7 A.

REMOVAL OR ABANDONMENT UST 0226253

We have a 3,000 gal. UST for fuel oil #2. It is located in the East driveway under eight inches of concrete. We desire to remove this tank from the site.

See attached proposal from Ted Slack Environmental Services, Inc., NOTS-004 for Scope of Work.

REICHHOLD

Date:_____

RON KURTZ
EHS MANAGER
2014652299

JIM FREEMAN
PLANT MANAGER

From the desk of.....

PAUL BRUSTOFSKI

8428910442

CLOSURE PLAN (ABANDONMENT)

FOR

UNDERGROUND #2 FUEL OIL STORAGE TANK

AT

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

PREPARED BY:

VECTRE CORPORATION
P. O. BOX 930
LAFAYETTE, NEW JERSEY 07848

JULY 21, 1992

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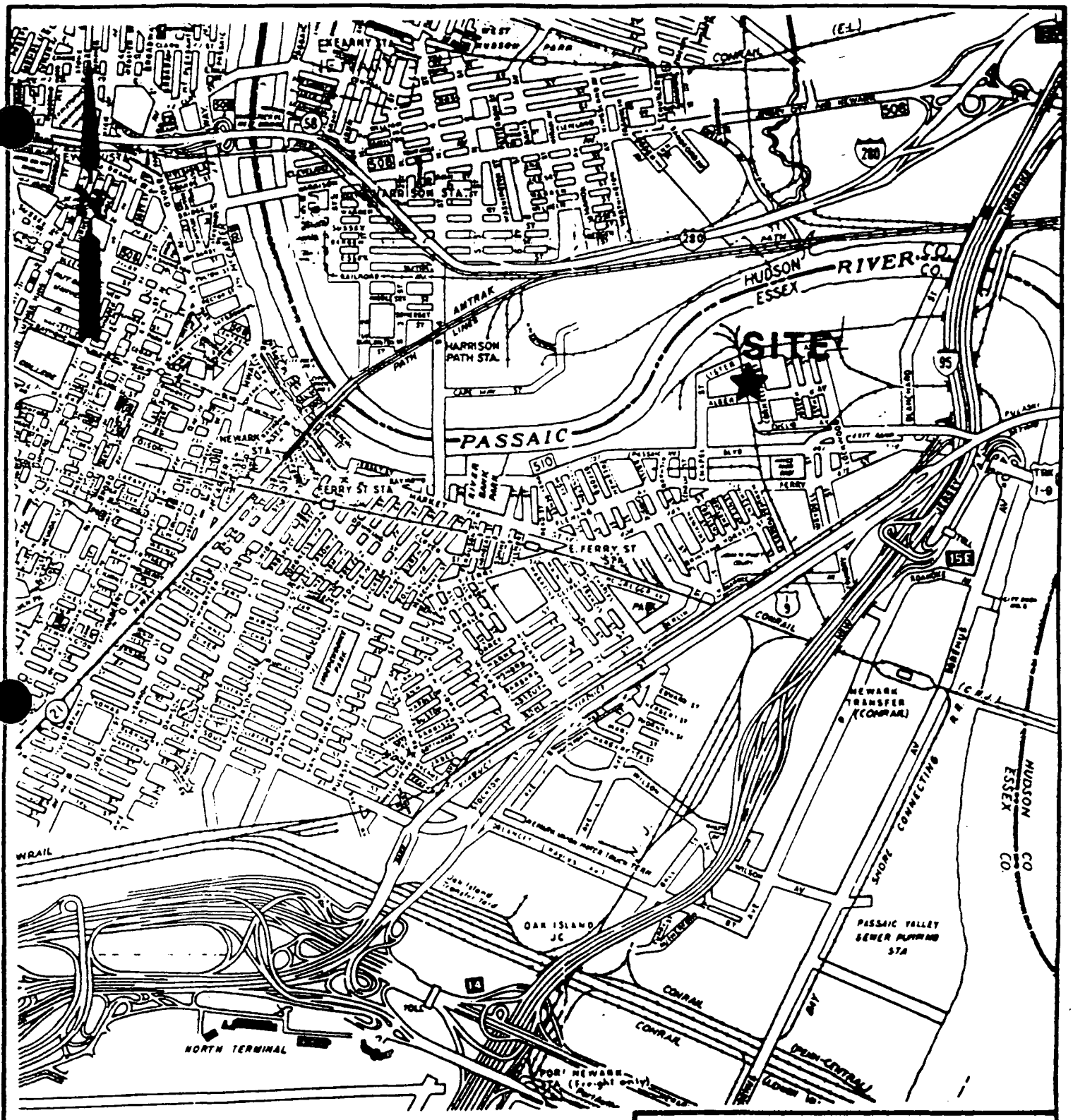
LIST OF FIGURES

1.0 INTRODUCTION

Reichhold Chemicals, Inc. has retained the services of Vectre Corporation to complete the Closure Plan Preparation and Implementation for abandonment of one 3,000 gallon underground #2 fuel oil storage tank (UST 0226253) at its facility at 46 Albert Avenue, Newark, New Jersey 07105 (Figure 1).

The Closure Plan for this facility consists of the following required information:

- Closure Plan Application
- Site Diagram
- Implementation Schedule
- Tank Decommissioning Plan
- Site Assessment Plan



APPROXIMATE SCALES

0 1000 2000 3000 4000 5000 Feet

0 200 400 600 800 1000 Meters

1 Kilometer

LOCATION MAP

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

SCALE AS SHOWN

FIGURE NO.	PROJECT NO.
1	RCI-VI

VECTRE CORPORATION

8428910447

2.0 IMPLEMENTATION SCHEDULE

The implementation dates currently anticipated for the field activities associated with this project are as follows:

Tank Abandonment:

Start date:	September 1, 1992
Completion data:	September 3, 1992
Soil sample collection:	September 2, 1992

The Closure Plan Implementation Summary, including all required information and supporting documentation, will be submitted within 90 days of completion of the closure plan implementation.

3.0 TANK DECOMMISSIONING PLAN

Vectre personnel will oversee the technical and regulatory tasks associated with the proper closure by abandonment of one 3,000 gallon #2 fuel oil storage tank at the Reichhold Chemicals facility. The tank is situated beneath a permanent structure and therefore requires abandonment in place.

In order to complete the tank closure in accordance with the requirements of the New Jersey Underground Storage Tank Regulations (N.J.A.C. 7:14B-9 et seq.) effective September 4, 1990, the following procedures will be implemented.

3.1 Site and Tank System Preparation

Prior to arrival on site, Vectre personnel will contact Garden State Underground Utilities to identify known underground utilities in the vicinity of the work area.

3.1 Site and Tank System Preparation, continued

Upon arrival, the tank area will be cordoned off to limit access by unauthorized personnel. Potential ignition sources within the area will be removed. A combustible gas indicator will be utilized to assess the vapor concentrations within the area prior to initiating work.

The product in the tank will be measured to determine the approximate quantity remaining. Product from the piping will be drained into the tank. The piping will be disconnected and capped. Liquids within the tank will be pumped out with a vacuum truck, in accordance with the operating and safety practices of American Petroleum Institute (API) Publication 2219. Upon completion of pumping procedures, an excavator will be used to expose an entrance point if the manway is inaccessible. All excavated soil will be screened for organic vapors with a photoionization detector (PID) and also visually inspected. Any contaminated soil encountered will be staged for sampling and disposal.

3.2 Tank Monitoring and Cleaning

A combustible gas indicator will be used to test the vapor concentrations within the tank atmosphere. The probe will be inserted into the tank to obtain readings from the bottom, middle and top portions of the tank.

If the readings obtained indicate flammable vapor levels in excess of 20 percent of the lower explosive limit, purging procedures will be implemented. If required, purging will be completed by adding carbon dioxide (dry ice) to the tank, utilizing the procedures outlined in API Recommended Practice 1604.

If readings are obtained below 20 percent of the lower explosive limit, tank cleaning procedures will be initiated. If the tank is not equipped with a manway, a non-sparking saw will be utilized to cut an access sufficient for entry.

The tank will be entered by tank cleaning personnel appropriately equipped with protective clothing, self-contained breathing apparatus, and lifelines. The interior surface of the tank will be squeegee cleaned, wiped, and power washed. Residuals and liquids will be pumped out with a vacuum truck and removed for disposal off site.

3.2 Tank Monitoring and Cleaning,, continued

The tank atmosphere will be evaluated during the cleaning process, as well as during subsequent removal procedures, until the tank has been abandoned.

3.3 Residual Disposal

Liquids and residuals removed from the tank will be transported to and disposed of under manifest. Copies of required disposal manifests and other documentation will be included in the Closure Plan Implementation Report.

3.4 Tank Abandonment

Upon completion of the cleaning and sampling procedures, the tanks will be abandoned in place by filling it with slurry mix concrete.

3.5 Site Restoration

Where examination indicates that any soil excavated from grade to the entry-way of the tank has no apparent contamination, the soil will be placed back into the excavation to restore the area to the original grade.

4.0 SITE ASSESSMENT PLAN

Prior to final abandonment of the tank, a site assessment will be conducted in accordance with the guidelines outlined in the NJDEPE "Interim Closure Requirements for Underground Storage Tank Systems" dated September, 1990. The procedures outlined in this section are proposed for the assessment of the 3,000 gallon #2 fuel oil tank to be abandoned at the site. It is designed to evaluate and document soil conditions surrounding the tank excavation area.

4.1 Soil Sample Collection

Upon completion of the tank cleaning procedures, soil samples will be collected from around the tank to document the condition of the soil. A total of seven (7) soil samples will be collected by cutting holes through the interior tank walls at specific points to expose the adjacent soil for sampling purposes.

4.1 Soil Sample Collection, continued

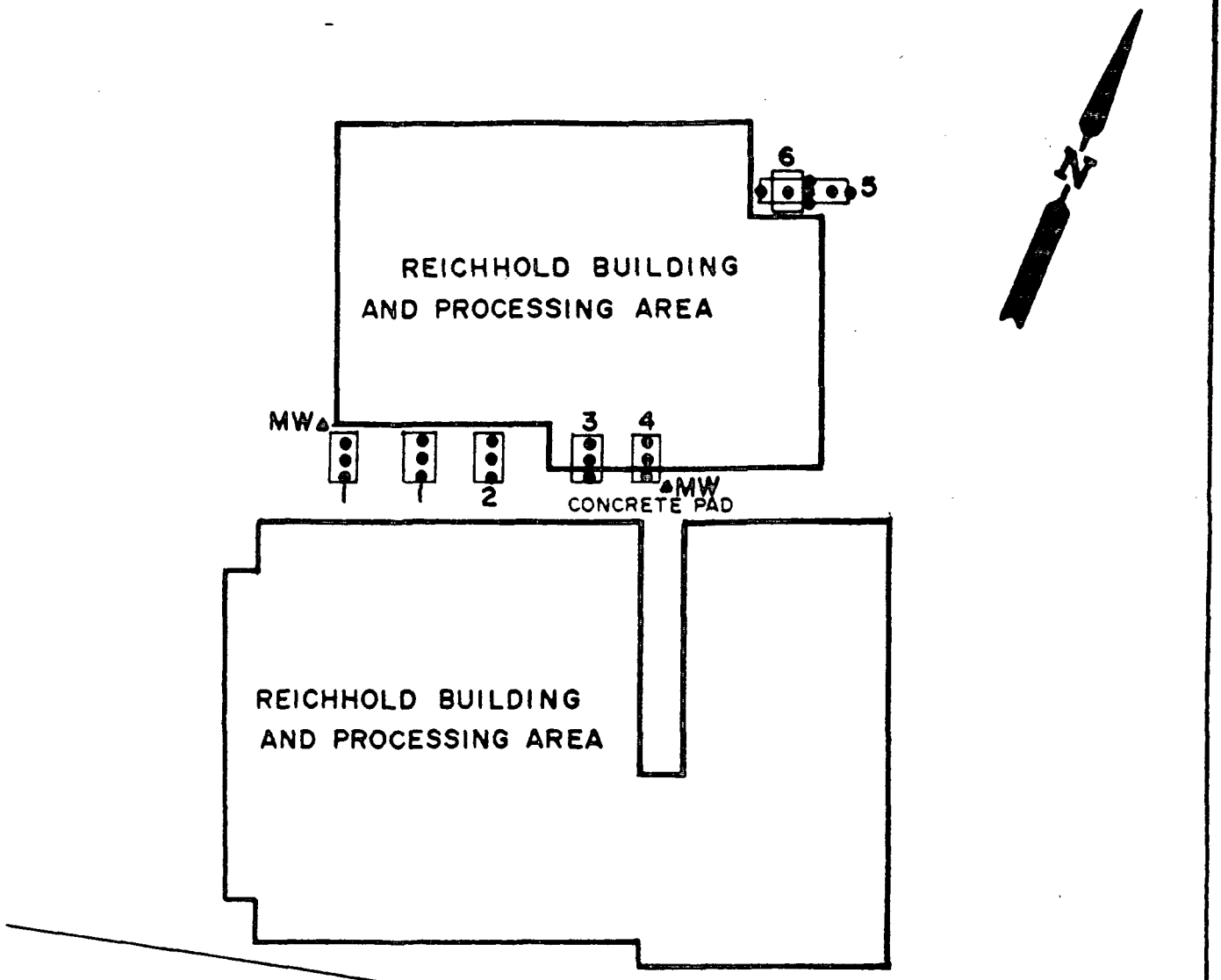
The seven samples will include one sample at each end and side of the tank and three along the center line at the base of the tank (Figure 2). The samples will be collected from soil located between 0 - 6 inches beyond the exterior of the tank.

All sampling procedures will be performed in accordance with the Division of Hazardous Site Mitigation Field Sampling Procedures Manual. All required quality assurance/quality control (QA/QC) and chain-of-custody procedures for sample collection will be followed and documented accordingly. A field blank will be appropriately obtained and analyzed to verify the accuracy of the results.

4.2 Soil Sample Analysis

The seven soil samples and the field blank will be properly packaged in ice to maintain a temperature of approximately 4° C and transported to an independent NJDEPE-certified laboratory.

The eight samples will be analyzed for total petroleum hydrocarbons (TPH) utilizing EPA Method 418.1. If any of the results obtained indicate TPH results of 1,000 ppm or greater, two



8428910455

LEGEND

1 GASOLINE UST
2 DIESEL UST
3 NAPHTHA UST
4 MINERAL SPIRITS UST
5 NO. 2 FUEL OIL UST
6 ABOVE GROUND STORAGE TANK (PERMANENT)
• PROPOSED POST EXCAVATION SOIL SAMPLE
▲ PROPOSED MONITORING WELL

SITE PLAN AND SAMPLE LOCATION MAP

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

NOT TO SCALE

FIGURE NO.	PROJECT NO.
2	RCI-VI

VECTRE CORPORATION

4.2 Soil Sample Analysis, continued

(2) samples with the highest readings will be analyzed for volatile organics (EPA 624+15).

The laboratory will provide laboratory chronicles and surrogates, spikes, and method detection limits. All quality assurance/quality control information required will be submitted in the Closure Plan Implementation Report.

CLOSURE PLAN (REMOVAL)
FOR
TWO UNDERGROUND LEADED GASOLINE STORAGE TANKS AND ONE UNDERGROUND DIESEL FUEL STORAGE TANK

AT

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

PREPARED BY:

VECTRE CORPORATION
P. O. BOX 930
LAFAYETTE, NEW JERSEY 07848

JULY 21, 1992

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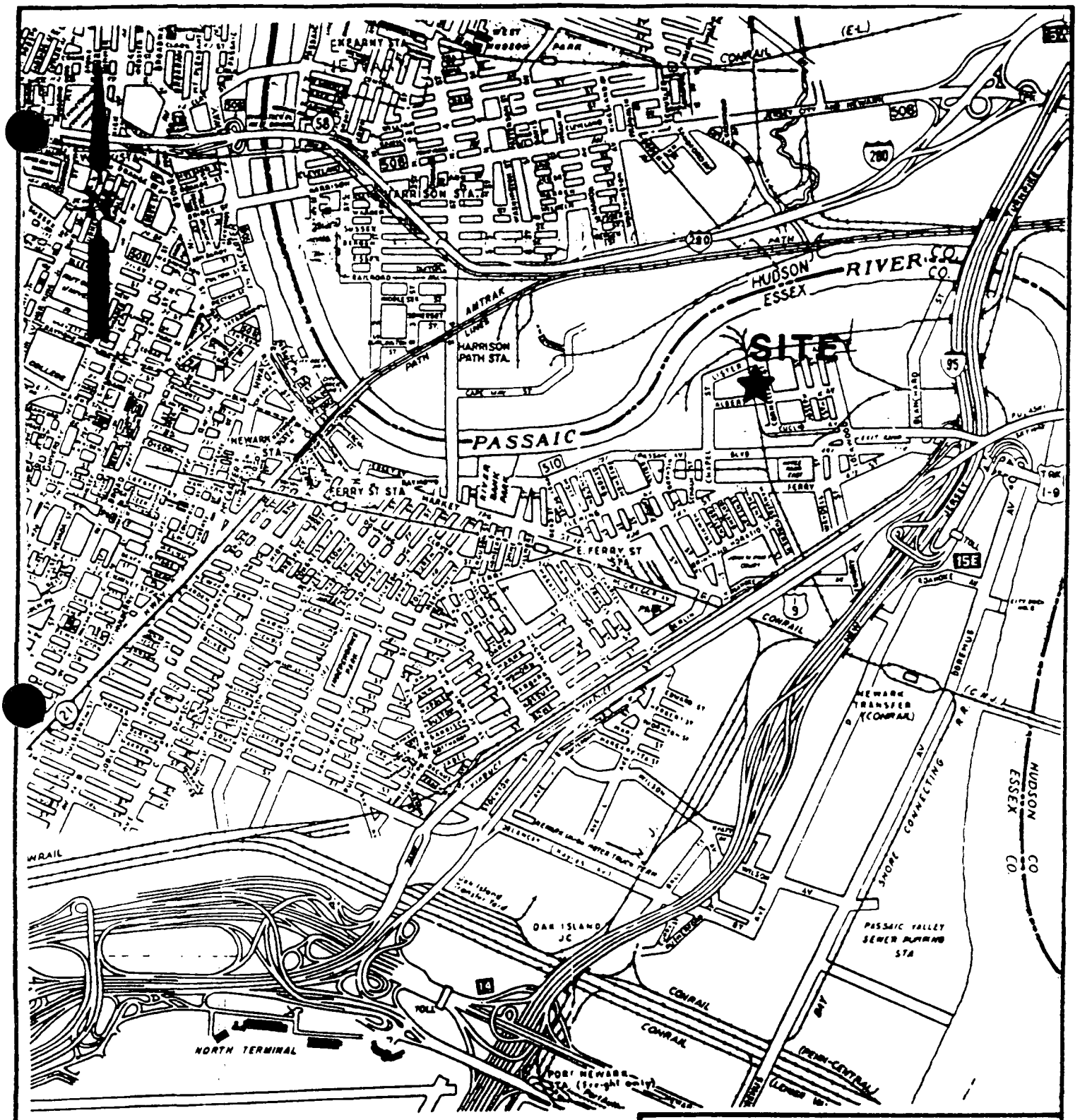
LIST OF FIGURES

1.0 INTRODUCTION

Reichhold Chemicals, Inc. has retained the services of Vectre Corporation to complete the Closure Plan Preparation and Implementation for two 500 gallon underground leaded gasoline storage tanks and one 500 gallon underground diesel storage tank at its facility at 46 Albert Avenue, Newark, New Jersey 07105 (Figure 1). A registration questionnaire for these previously unregistered tanks is being submitted to the NJDEPE with this Closure Plan and application.

The Closure Plan for this facility consists of the following required information:

- UST Registration Questionnaire
- Closure Plan Application
- Site Diagram
- Implementation Schedule
- Tank Decommissioning Plan
- Site Assessment Plan



APPROXIMATE SCALES

0 1000 2000 3000 4000 5000 Feet

0 200 400 600 800 1000 Meters

1 Kilometer

LOCATION MAP

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

SCALE AS SHOWN

FIGURE NO.	PROJECT NO.
1	RCI-VI

VECTRE CORPORATION

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2.0 IMPLEMENTATION SCHEDULE

The implementation dates currently anticipated for the field activities associated with this project are as follows:

Tank Abandonment:

Start date:	September 1, 1992
Completion data:	September 2, 1992
Soil sample collection:	September 1, 1992
Monitor well installation:	September 4, 1992
Monitor well sampling:	September 18, 1992

The Closure Plan Implementation Summary, including all required information and supporting documentation, will be submitted within 90 days of completion of the closure plan implementation.

3.0 TANK DECOMMISSIONING PLAN

Vectre personnel will oversee the technical and regulatory tasks associated with the proper closure of the tanks located at the Reichhold Chemicals facility in Newark, New Jersey.

In order to complete the tank closure in accordance with the requirements of the New Jersey Underground Storage Tank Regulations (N.J.A.C. 7:14B-9 et seq.) effective September 4, 1990, the following procedures will be implemented.

3.1 Site and Tank System Preparation

Prior to arrival on site, Vectre personnel will contact Garden State Underground Utilities to identify known underground utilities in the vicinity of the work area.

Upon arrival, the tank area will be cordoned off to limit access by unauthorized personnel. Potential ignition sources within the area will be removed. A combustible gas indicator will be utilized to assess the vapor concentrations within the area prior to initiating work.

3.1 Site and Tank System Preparation, continued

The product in the tank will be measured to determine the approximate quantity remaining. Product from the piping will be drained into the tank. The piping will be disconnected and capped. Liquids within the tank will be pumped out with a vacuum truck, in accordance with the operating and safety practices of American Petroleum Institute (API) Publication 2219.

Upon completion of the pumping procedures, a track-mounted excavator will be utilized to excavate the material covering the tank and expose the top of the tank. Excavated soils will be visually examined, and screened utilizing a photoionization detector (PID), and staged on 6 mil plastic sheeting. Any soils which appear to be contaminated will be staged separately for sampling classification, and disposal.

3.2 Tank Monitoring and Cleaning

Once the tops of the tanks are exposed, all non-product lines and tank fixtures, except for any vent lines, will be removed and capped. All tank openings other than vent lines will be plugged to prevent possible spillage. All piping removed will be staged on plastic for subsequent disposal with the tank.

3.2 Tank Monitoring and Cleaning, continued

After the tanks have been exposed and prepared, a combustible gas indicator will be used to test the vapor concentrations within the tank atmosphere. The probe will be inserted into the tanks to obtain readings from three depths: at the bottom, middle and top portions of the tank.

If the readings obtained indicate flammable vapor levels in excess of 20 percent of the lower explosive limit, purging procedures will be implemented. If required, purging will be completed by adding carbon dioxide (dry ice) to the tanks, utilizing the procedures outlined in API Recommended Practice 1604.

If readings are obtained below 20 percent of the lower explosive limit, tank cleaning procedures will be initiated. If the tanks are not equipped with a manway, a non-sparking saw will be utilized to cut an access sufficient for entry.

3.2 Tank Monitoring and Cleaning, continued

The tanks will be entered by tank cleaning personnel appropriately equipped with protective clothing, self-contained breathing apparatus, and lifelines. The interior surfaces of the tanks will be squeegee cleaned and wiped with clean industrial rags. Residuals and liquids will be pumped out with a vacuum truck and removed for disposal off site.

The tank atmosphere will be evaluated during the cleaning process, as well as during subsequent removal procedures, until the tank has been prepared for off-site disposal.

3.3 Tank Excavation and Removal

Once the tank cleaning procedures are completed, soil from the sides of the tanks will be excavated as necessary to permit removal of the tanks. The tanks will be lifted from the excavation using a chain attached to its lift lugs. The tank will be staged on plastic and secured with blocks.

The tanks' exteriors will be inspected for corrosion holes. If corrosion holes are identified, these will be documented and the

3.3 Tank Excavation and Removal, continued

client consulted regarding reporting requirements to the Environmental Action Hotline (609-292-7172).

Following excavation, the tanks will be prepared for transportation and disposal. Holes will be cut in the ends of the tanks to prevent its subsequent reuse. Labels will be affixed to the tanks identifying the site or origin, the products stored in the tanks, the date of tank removal and the ultimate disposal destination of the tanks. The tanks will be lifted onto a flatbeld truck, secured with blocks and chains and transported off site for disposal.

3.4 Tank and Residual Disposal

The tanks will be transported and disposed of as scrap metal. All liquids and residuals removed from the tanks will be transported to and disposed of under manifest. Copies of required disposal manifests and other documentation will be included in the Closure Plan Implementation Report to be submitted following closure of the tanks.

3.5 Site Restoration

The excavation will be lined with 6 mil plastic. Where examination indicates that excavated soils show no evidence of contamination, the excavated soils will be placed back into the excavation and covered with plastic. Clean bank-run gravel will be added to bring the excavated area up to grade.

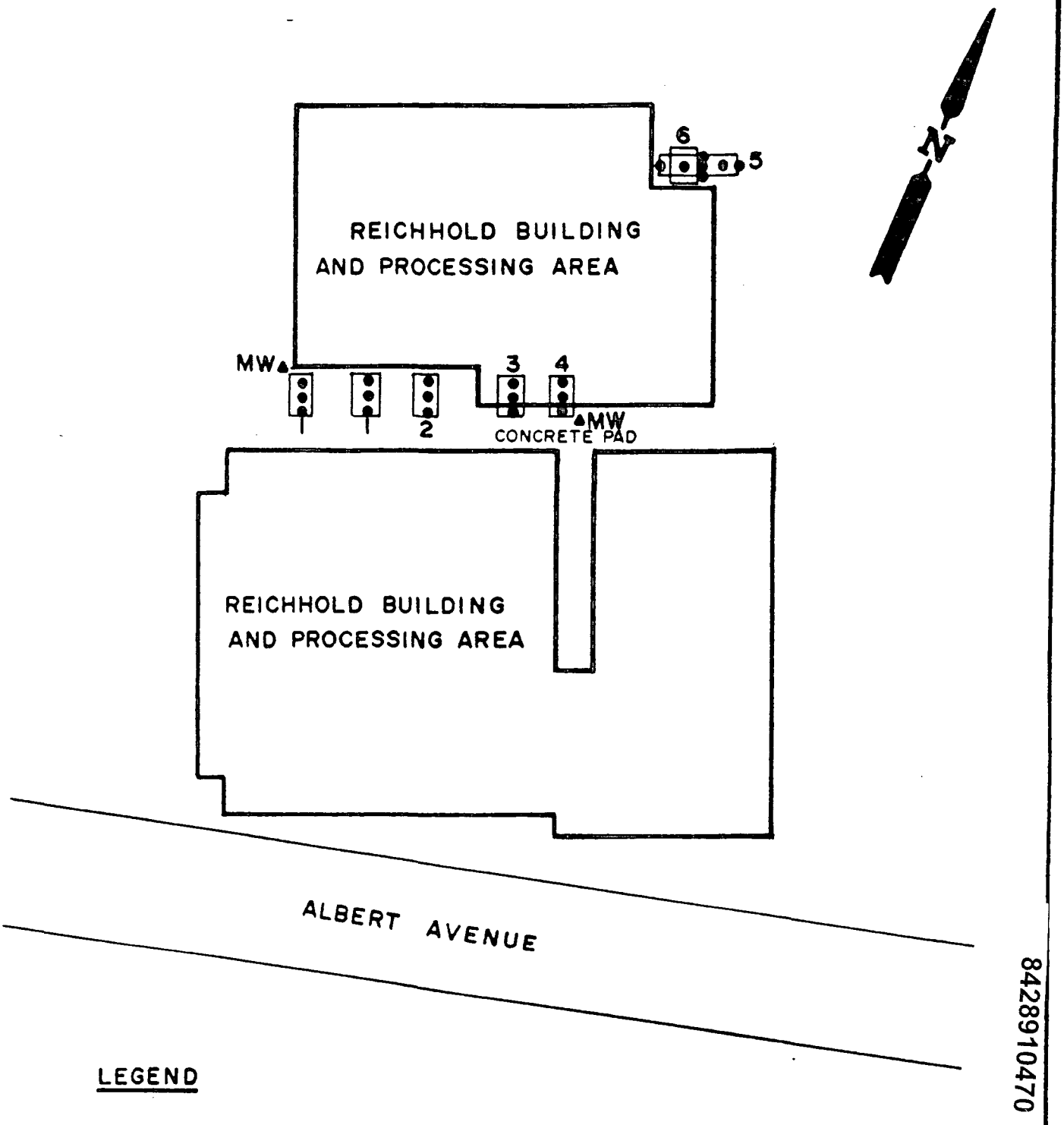
4.0 SITE ASSESSMENT PLAN

Prior to backfilling the tank excavation, a site assessment will be conducted in accordance with the guidelines outlined in the NJDEPE "Interim Closure Requirements for Underground Storage Tank Systems" dated September, 1990. The Site Assessment Plan is designed to evaluate and document soil conditions in the tank excavation area.

The following procedures are proposed for the assessment of the two 500 gallon gasoline tanks and one 500 gallon diesel tank to be removed at the site (Figure 2).

4.1 Field Testing

The tank excavation area will be examined by collecting soil samples from the sides and bottom of the excavation to determine the presence, if any, of free-product contaminated soils. The exact locations of the soil samples will be determined in the field. The soil samples will be used to conduct several field testing procedures outlined in Appendix 1, Step 2 of the NJDEPE Interim Closure Requirements document, including the field sorption test and the soil/water agitation method, to determine the presence of free product contaminated soil.



8428910470

LEGEND

1 GASOLINE UST
2 DIESEL UST
3 NAPHTHA UST
4 MINERAL SPIRITS UST
5 NO. 2 FUEL OIL UST
6 ABOVE GROUND STORAGE TANK (PERMANENT)
• PROPOSED POST EXCAVATION SOIL SAMPLE
▲ PROPOSED MONITORING WELL

SITE PLAN AND SAMPLE LOCATION MAP

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

NOT TO SCALE

FIGURE NO.	PROJECT NO.
2	RCI-VI

VECTRE CORPORATION

4.1 Field Testing, continued

If free product contaminated soils are identified in the excavation, additional field testing will be conducted as necessary to determine the extent of additional excavation required to remove the contaminated soils. All additional excavated soil will be staged on separate plastic sheeting pending analysis and disposal.

4.2 Screening Evaluation of the Excavation

Once excavation is determined to be complete, the walls and floor of the excavation will be screened utilizing a photoionization detector (PID). The readings obtained will be recorded and evaluated to identify potential post-excavation soil sample locations within the excavation.

Based on the readings obtained from the screening evaluation, the client may also be consulted regarding possible additional soil excavation. If additional soil excavation is performed, a second screening will be performed upon completion, and additional readings recorded and evaluated.

4.3 Soil Sample Collection

Upon completion of the above field evaluation procedures, post-excavation soil samples will be collected from native soils within the excavation area to document the condition of the remaining soils. A total of nine (9) discrete soil samples will be collected from the excavation area, at depths of between 0-6 inches below the surface. The final sampling locations will be field determined utilizing the PID screening readings. As piping runs from the tanks are less than 15 feet in length, no additional soil sampling specifically for piping is required. The results of all post-excavation sampling will be provided in the Closure Plan Implementation Report.

Sampling procedures will be performed in accordance with the Division of Hazardous Site Mitigation Field Sampling Procedures Manual. All required quality assurance/quality control and chain-of-custody procedures for sample collection will be followed and documented accordingly. A field blank sample will be appropriately obtained and analyzed to verify the accuracy of the results.

4.4 Soil Sample Analysis

The nine post-excavation soil samples and field blank samples will be properly packaged and transported, maintaining a temperature of 4 degrees Celsius, to an independent NJDEPE certified laboratory.

Three soil samples from beneath the diesel tank will be analyzed for total petroleum hydrocarbons (TPH) utilizing EPA Method 418.1. A field blank will also be submitted to the lab. The laboratory will be requested to provide the analytical results within seven (7) days, to allow evaluation of the results and determination of additional analytical requirements within the required sample holding times. If any of the results obtained indicate TPH results of 1,000 parts per million (ppm) or greater, one sample with the highest readings and the field blank sample will be analyzed for volatile organics +15.

The six (6) soil samples from beneath the two gasoline tanks and a field blank will be analyzed for volatile organics and xylenes with a forward library search (VO+15) and lead.

4.4 Soil Sample Analysis, continued

The laboratory will provide laboratory chronicles and surrogates, spikes, and method detection limits. All quality assurance/quality control information required will be submitted in the Closure Plan Implementation Report.

4.5 Monitoring Well Installation

One monitoring well is required as per BUST guidelines stipulated under N.J..A.C. 7:14B-9-2(c). and will be installed in accordance with appropriate regulations. The well will be installed as close as possible to the tank access excavation as shown in Figure 2. The well will be screened 3 feet above the first water encountered and to at least 5 feet below the water table. The well will be drilled by a New Jersey licensed well driller, who will obtain the necessary permit before drilling. A Vectre geologist will log the well data and be on site for all drilling and sampling activities.

4.6 Monitoring Well Sampling and Analysis

The sampling of the monitor well will be performed in accordance with State requirements and will not be sampled until two weeks after well installation and development.

Following collection of groundwater samples, the samples will be transported to a NJDEPE certified laboratory for analyses. The samples will be analyzed for volatile organics (EPA 624+15, GC/MS) modified to include calibration for the following target compounds: xylenes, methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA). In addition, field and trip blanks will be appropriately obtained and analyzed in accordance with required QA/QC procedures.

CLOSURE PLAN (ABANDONMENT)

FOR

ONE UNDERGROUND V. M & P NAPHTHA STORAGE TANK AND ONE UNDERGROUND MINERAL SPIRITS STORAGE TANK

AT

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

PREPARED BY:

VECTRE CORPORATION
P. O. BOX 930
LAFAYETTE, NEW JERSEY 07848

JULY 21, 1992

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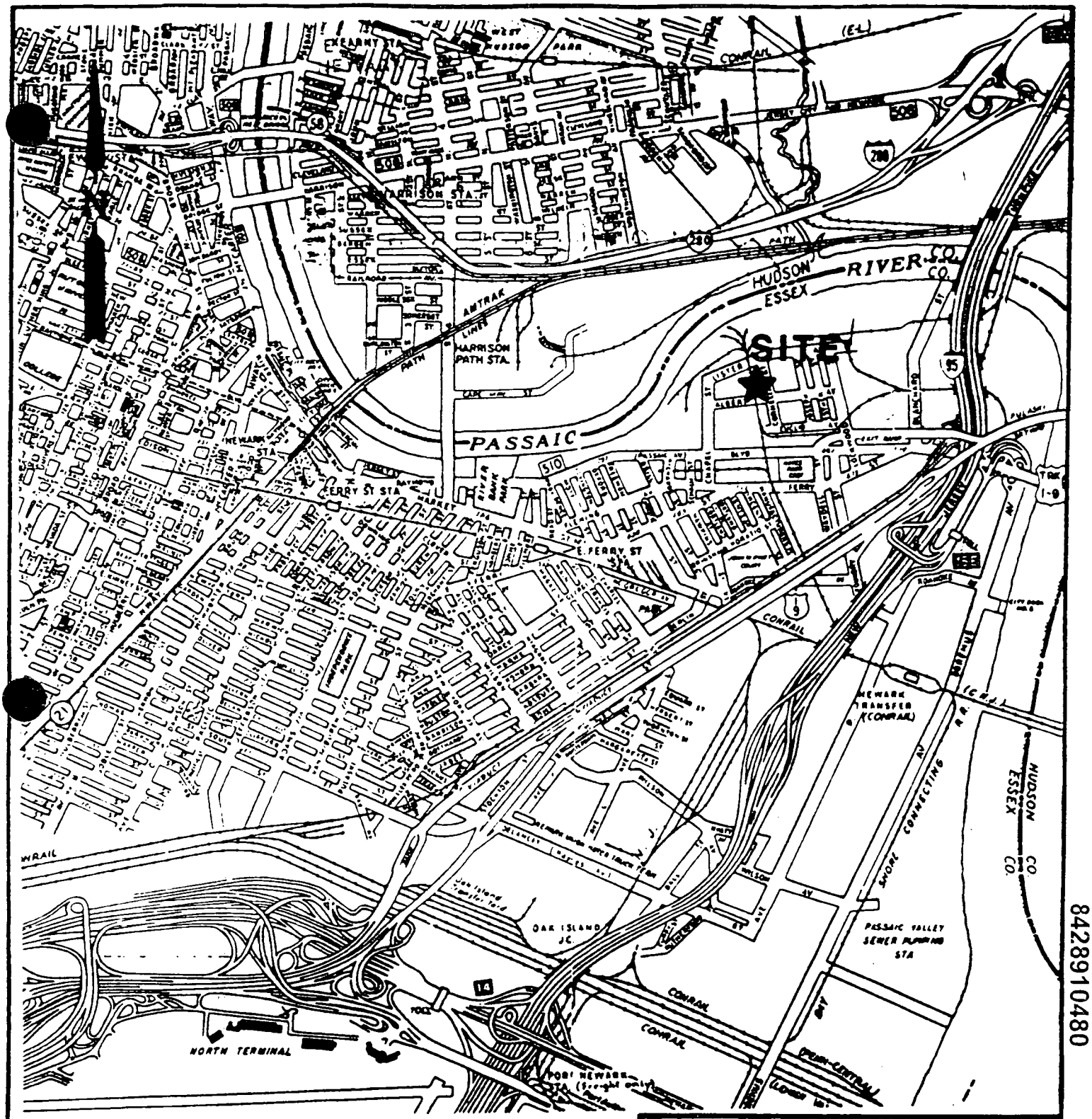
LIST OF FIGURES

1.0 INTRODUCTION

Reichhold Chemicals, Inc. has retained the services of Vectre Corporation to complete the Closure Plan Preparation and Implementation for abandonment of one 500 gallon V, M and P Naphtha underground storage tank and one 500 gallon underground mineral spirits storage tank at its facility at 46 Albert Avenue, Newark, New Jersey 07105 (Figure 1). A registration questionnaire for these previously unregistered tanks is being submitted to the NJDEPE with this Closure Plan application.

The Closure Plan for this facility consists of the following required information:

- UST Registration Questionnaire
- Closure Plan Application
- Site Diagram
- Implementation Schedule
- Tank Decommissioning Plan
- Site Assessment Plan



APPROXIMATE SCALES

0 1000 2000 3000 4000 5000 Feet

0 200 400 600 800 1000 Meters

1 Kilometer

LOCATION MAP

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

SCALE AS SHOWN	
FIGURE NO. 1	PROJECT NO. RCI-VI

VECTRE CORPORATION

8428910480

2.0 IMPLEMENTATION SCHEDULE

The implementation dates currently anticipated for the field activities associated with this project are as follows:

Tank Abandonment:	
Start date:	September 1, 1992
Completion data:	September 3, 1992
Soil sample collection:	September 2, 1992
Monitor well installation:	September 4, 1992
Monitor well sampling:	September 18, 1992

The Closure Plan Implementation Summary, including all required information and supporting documentation, will be submitted within 90 days of completion of the closure plan implementation.

3.0 TANK DECOMMISSIONING PLAN

Vectre personnel will oversee the technical and regulatory tasks associated with the proper closure by abandonment of one 500 gallon underground V, M, and P Naphtha storage tank and one 500 gallon underground mineral spirits storage tank at the Reichhold Chemicals facility in Newark, New Jersey. The tanks are located beneath a permanent structure and require abandonment in place.

In order to complete the tank closure in accordance with the requirements of the New Jersey Underground Storage Tank Regulations (N.J.A.C. 7:14B-9 et seq.) effective September 4, 1990, the following procedures will be implemented.

3.1 Site and Tank System Preparation

Prior to arrival on site, Vectre personnel will contact Garden State Underground Utilities to identify known underground utilities in the vicinity of the work area.

3.1 Site and Tank System Preparation, continued

Upon arrival, the tank area will be cordoned off to limit access by unauthorized personnel. Potential ignition sources within the area will be removed. A combustible gas indicator will be utilized to assess the vapor concentrations within the area prior to initiating work.

The product in the tank will be measured to determine the approximate quantity remaining. Product from the piping will be drained into the tank. The piping will be disconnected and capped. Liquids within the tank will be pumped out with a vacuum truck, in accordance with the operating and safety practices of American Petroleum Institute (API) Publication 2219.

The two tanks are situated beneath the permanent facility with only a limited portion extending to the outside of the building. The sides of the tanks are accessible by digging beneath a concrete pad just outside the building.

Upon completion of the pumping procedures, a backhoe will be utilized to excavate the concrete pad and underlying material to expose the sides of the tanks. Excavated materials will be

3.1 Site and Tank System Preparation, continued

visually examined, and screened for the presence of organic vapors utilizing a photoionization detector (PID), and staged on 6 mil plastic sheeting. Any soil which appears to be contaminated will be staged separately for sampling, classification, and disposal.

3.2 Tank Monitoring and Cleaning

A combustible gas indicator will be used to test the vapor concentrations within the tank atmosphere. The probe will be inserted into the tank to obtain readings from the bottom, middle and top portions of the tank.

If the readings obtained indicate flammable vapor levels in excess of 20 percent of the lower explosive limit, purging procedures will be implemented. If required, purging will be completed by adding carbon dioxide (dry ice) to the tank, utilizing the procedures outlined in API Recommended Practice 1604.

If readings are obtained below 20 percent of the lower explosive limit, tank cleaning procedures will be initiated. If the tank is not equipped with a manway, a non-sparking saw will be utilized to cut an access sufficient for entry.

3.2 Tank Monitoring and Cleaning, continued

The tank will be entered from the side by tank cleaning personnel appropriately equipped with protective clothing, self-contained breathing apparatus, and lifelines. The interior surface of the tank will be squeegee cleaned, wiped, and power washed. Residuals and liquids will be pumped out with a vacuum truck and removed for disposal off site.

The tank atmosphere will be evaluated during the cleaning process, as well as during subsequent removal procedures, until the tank has been abandoned.

3.3 Residual Disposal

Liquids and residuals removed from the tank will be transported to and disposed of under manifest. Copies of required disposal manifests and other documentation will be included in the Closure Plan Implementation Report.

3.4 Tank Abandonment

Upon completion of the cleaning and sampling procedures the tanks will be abandoned in place by filling it with slurry mix concrete.

3.5 Site Restoration

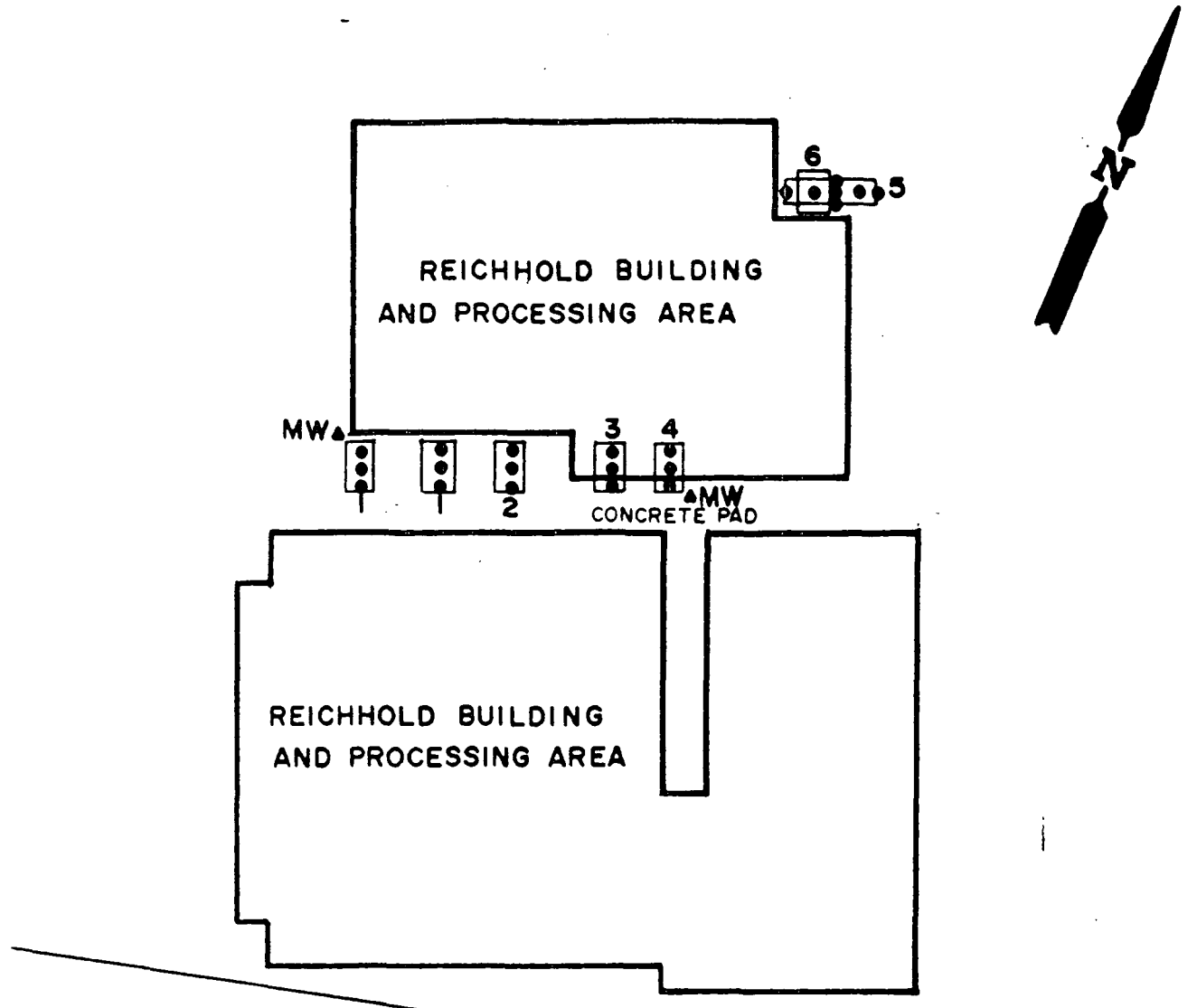
Where examination indicates that the soil excavated from grade to the side of the tank has no apparent contamination, the soil will be placed back into the excavation to restore the area to the original grade.

4.0 SITE ASSESSMENT PLAN

Prior to abandonment of the tank, a site assessment will be conducted in accordance with the guidelines outlined in the NJDEPE "Interim Closure Requirements for Underground Storage Tank Systems" dated September, 1990. The procedures outlined in this section are proposed for the assessment of the one 500 gallon V, M, and P Naphtha tank and one 500 mineral spirits tank to be abandoned at the site. It is designed to evaluate and document soil conditions surrounding the tank.

4.1 Soil Sample Collection

Upon completion of the tank cleaning procedures, soil samples will be collected from around the tanks to document the condition of the soil. Three samples will be collected adjacent to each tank by cutting holes through the tank walls exposing the underlying soil. The samples will be collected from the soil located between 0 to 6 inches beyond the tank walls (Figure 2).



8428910488

LEGEND

1	GASOLINE UST
2	DIESEL UST
3	NAPHTHA UST
4	MINERAL SPIRITS UST
5	NO. 2 FUEL OIL UST
6	ABOVE GROUND STORAGE TANK (PERMANENT)
•	PROPOSED POST EXCAVATION SOIL SAMPLE
MW▲	PROPOSED MONITORING WELL

SITE PLAN AND SAMPLE LOCATION MAP

REICHHOLD CHEMICALS, INC.
46 ALBERT AVENUE
NEWARK, NEW JERSEY 07105

NOT TO SCALE

FIGURE NO.	PROJECT NO.
2	RCI-VI

VECTRE CORPORATION

4.1 Soil Sample Collection, continued

All sampling procedures will be performed in accordance with the Division of Hazardous Site Mitigation Field Sampling Procedures Manual. All required quality assurance/quality control (QA/QC) and chain-of-custody procedures for sample collection will be followed and documented accordingly. A field blank will be appropriately obtained and analyzed to document the adequacy of the decontamination procedures.

4.2 Soil Sample Analysis

The six soil samples and the field blank will be properly packaged in ice to maintain a temperature of approximately 4° C and transported to an independent NJDEPE-certified laboratory. The samples will be analyzed for volatile organics and base neutrals.

The laboratory will provide laboratory chronicles and surrogates, spikes, and method detection limits. All quality assurance/quality control information required will be submitted in the Closure Plan Implementation Report.

4.3 Monitoring Well Installation

One monitoring well is required as per BUST guidelines stipulated under N.J.A.C. 7:14B-9-2(c). and will be installed in accordance with appropriate regulations. The well will be installed as close as possible to the tank access excavation as shown in Figure 2. The well will be screened 3 feet above the first water encountered and to at least 5 feet below the water table. The well will be drilled by a New Jersey licensed well driller, who will obtain the necessary permit before drilling. A Vectre geologist will log the well data and be on site for all drilling and sampling activities.

4.4 Monitoring Well Sampling and Analysis

The sampling of the monitor well will be performed in accordance with State requirements and will not be sampled until two weeks after well installation and development.

4.4 Monitoring Well Sampling and Analysis, continued

Following collection of groundwater samples, the samples will be transported to a NJDEPE certified laboratory for analyses. The samples will be analyzed for volatile organics (EPA 624+15) and base neutral (EPA 625+15) compounds. In addition, field and trip blanks will be obtained and analyzed in accordance with the required QA/QC procedures.

SCOPE OF WORK
UNDERGROUND STORAGE TANK CLOSURE

Reichhold Chemicals, Inc.
46 Albert Avenue
Newark, NJ 07105

Background: The Reichhold Chemicals plant on Albert Avenue in Newark, New Jersey has one registered underground storage tank. The tank capacity is 3000 gallons, and it is used to store no. 2 fuel oil. The tank is no longer in use, and therefore must be closed under New Jersey law. However, the tank is inaccessible for removal, and must be abandoned in place. This project involves closure of this tank in accordance with the requirements of New Jersey's UST Technical Requirements and Procedures found at N.J.A.C. 7:14B - Subchapter 9, and will be accomplished in three phases. Proposals are being sought for Phase I, development of a closure plan for the tank.

Outline of Three Phases:

1. Attachment I shows that the UST is located beneath a 10,000 gallon aboveground phthalic anhydride tank that sits on a concrete pad. The first task of Phase I is for a professional engineer to determine if the UST is inaccessible and certify that it meets the NJ DEPE requirements for abandonment in place.

2. A UST Closure Plan Approval Application (CPAA) is to be prepared and submitted to NJ DEPE at least 30 days before initiating the closure activity. The CPAA is to include a tank decommissioning plan, a site assessment plan prepared by a qualified ground water consultant, an implementation schedule for proposed activities, a site map drawn to scale (to be provided by Reichhold), and the justification for abandonment in place.

3. Once closure approval is obtained from NJ DEPE, the implementation of the closure plan, which is Phase II, will be carried out at the site by a contractor that is hired by Reichhold. The tank decommissioning plan and the site assessment will be used to prepare the bid package for the contractor to perform this work. The appropriate local demolition permits will be obtained by the contractor performing the work.

4. Within 90 days of completion of site activities, a report detailing completion of the closure plan is to be submitted to the NJ DEPE, with proper certification. This activity completes both Phase I and Phase II.

5. Phase III, if necessary, will involve any monitoring or remediation activities that are found to be needed following the tank closure.

PHASE I - CLOSURE PLAN DEVELOPMENT

Tasks in Phase I:

Please provide a cost estimate for timely completion of the following tasks:

1. Professional Engineer certification that the UST is inaccessible.

2. Development of a closure plan for submission to NJ DEPE that includes the following elements: a site assessment plan prepared by an individual that meets NJ DEPE requirements for a qualified ground water consultant; an appropriate tank decommissioning plan; an implementation schedule; and, the justification for abandonment in place.

3. Evaluation of the results of any site assessment sampling requirements.

4. Completion of those sections of the report due to NJ DEPE following implementation of the closure plan applicable to Phase I activities.

5. Any other activities that you feel is necessary for completion of Phase I. Please itemize these separately.

Submittal of Proposals:

Please include a schedule with your proposal. Proposals are to be submitted to the following location ***on or before December 10, 1991***:

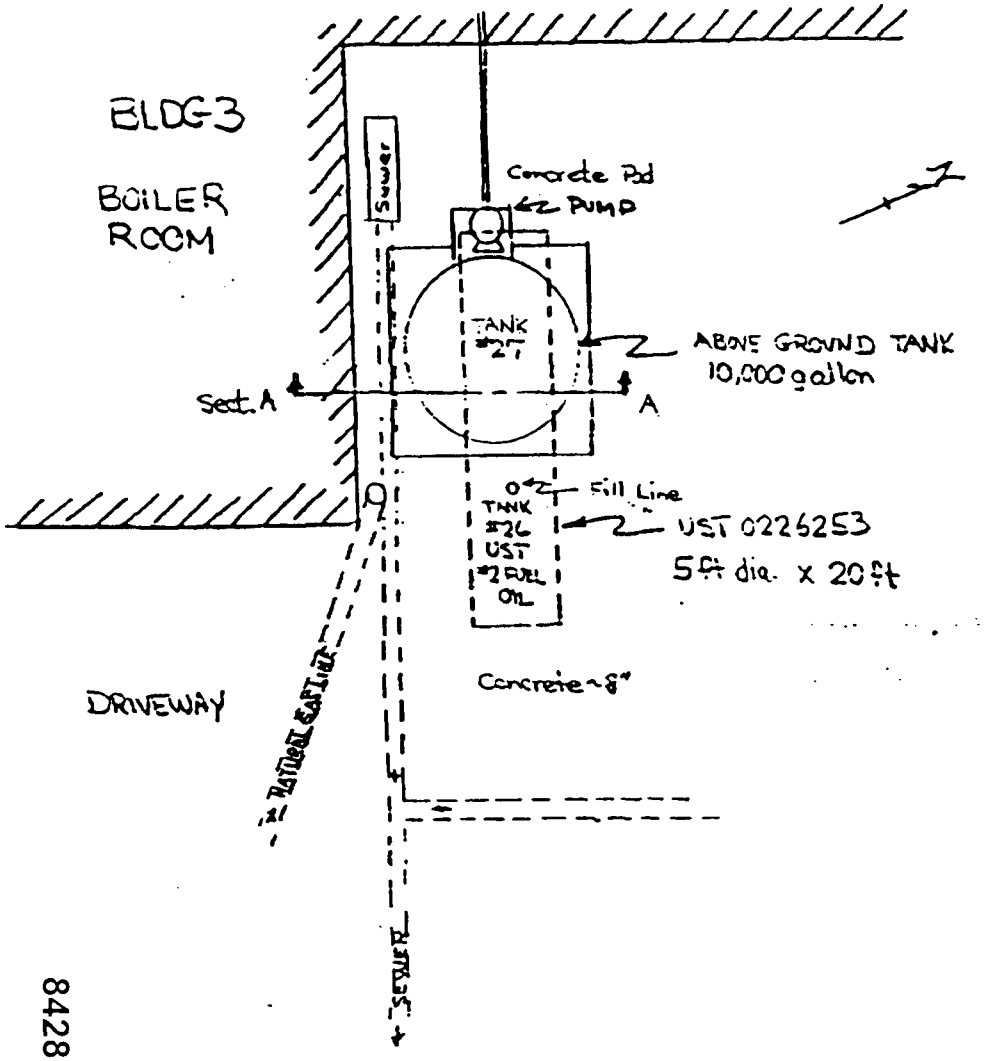
Victoria Will
Reichhold Chemicals, Inc.
(919) 990-7836 - Phone
(919) 990-7703 - Fax

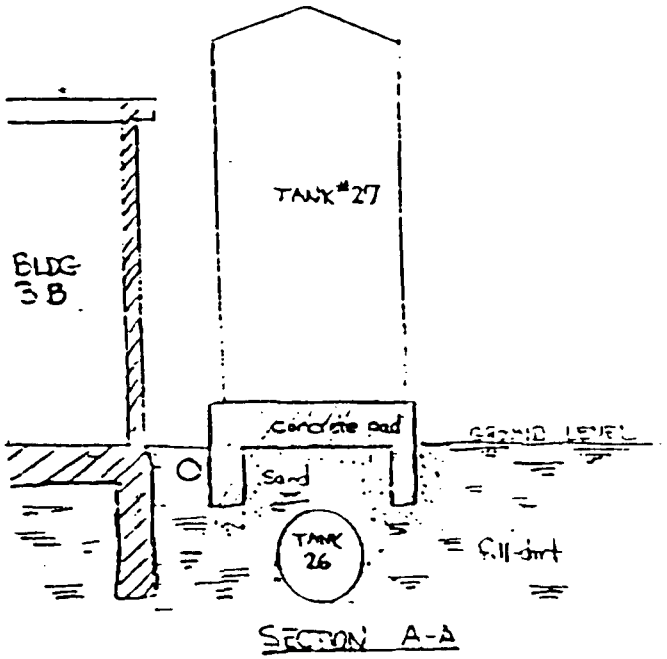
If the submittal is *via U.S. mail*, the following address is to be used:

P.O. Box 13582
Research Triangle Park, NC 27709

If the submittal is *via overnight delivery*, the following address is to be used:

Reichhold Chemicals, Inc.
2400 Ellis Road
Durham, NC 27703-5543





SECTION A-A

ATTACHMENT 1

8428910494

REICHHOLD CHEMICALS, INC.
46 Albert Ave.
Newark NJ 07105

REICHHOLD CHEMICALS, INC.
P. O. Box 13582
Research Triangle Park, NC 27709

FACSIMILE TRANSMITTAL SHEET

PLEASE DELIVER TO: *Mike Baxi/Bob Naujelis*

FIRM: *Reichhold*

CITY/STATE: *Doremus Avenue Newark, NJ*

FAX NUMBER: *(201) 817-9173*

COMMENTS: *This is the request for proposals that I was going to send out for preparation of the closure plan for UST closure at Albert Avenue. I am looking for 3 engineering firms to submit this RFP to - O'Brien & Gere, Foster Wheeler, and CH_2M Hill. If you have anyone else you would prefer that I send this to, please let me know before the end of Wednesday. Thanks.*

FROM: *Vicky Will*

FAX NUMBER: *(919) 990-7703*

DATE TRANSMITTED: *November 25, 1991*

TOTAL NUMBER OF PAGES (INCLUDING TRANSMITTAL SHEET): *4*

IF YOU DO NOT RECEIVE ALL THE SHEETS CALL: *VICKY WILL (919) 990-7836*

VECTRE™
CORPORATION
"Environmental Integrity with Economic Efficiency"

P.O. Box 930
Lafayette, New Jersey 07848-0930
(201) 383-2500

March 17, 1993

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
Bureau of Underground Storage Tanks
CN 029
Trenton, New Jersey 08625-0029
Attn: Joseph Miller, Section Chief

Re: Reichhold Chemicals, Inc.
46 Albert Avenue
Newark, Essex County
UST # 0226253
TMS # C-92-3204 to 3206
Case # 92-11-5-1220-55

Dear Mr. Miller:

On November 5, 1992 Vectre Corporation supervised the removal or abandonment-in-place of six USTs at the above facility. On November 5 a potential discharge was called into the DEPE Hotline and the case number shown above was assigned to the facility. The Remedial Investigation Report was due, according to N.J.A.C. 7:14B-8.3, on or about March 5, 1993. Installation of a monitoring well was delayed due to paving activities at the site. Because of the delay, Vectre requests an extention for the submission of the report to April 15, 1993.

Please contact me at (201)383-2500 if there are any problems with the requested new deadline. Thank you.

Sincerely,

Jerry L. Haug
Project Manager

JLH/jh

cc: Mike Baxi, Reichhold Chemicals

8428910496

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION -
BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS # C-92-3205 **UST #** 0226253

Reichhold Chemicals
46 Albert Ave.
Newark NJ

(Essex)

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et seq.:

REMOVAL OF: one 3,000 gallon #2 Fuel/Heating Oil UST(s), and appurtenant piping.

SITE ASSESSMENT: Soil samples will be taken every five (5) feet along the center line of each tank and one (1) soil sample for every 15 feet along all associated piping. Two (2) additional samples will be taken per tank and biased to the areas of highest field screened readings. Samples will be analyzed for TPHC. If any results are higher than 1000 ppm then analyze 25% of the samples for VO+10.

ON-SITE MANAGER: Rob Naujelis **TELEPHONE:** (201)589-3714

OWNER: **TELEPHONE:**

EFFECTIVE DATE: Sept 15, 1992

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.

Michael S Kelly (for)

8428910497

KEVIN F. KRATINA, ACTING BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION -
BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS # C-92-3204 **UST #** 0226253

Reichhold Chemicals
46 Albert Ave.
Newark NJ

(Essex)

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et seq.:

REMOVAL OF: two 500 gallon gasoline UST(s), one 500 gallon diesel UST(s), and associated piping.

SITE ASSESSMENT: Soil samples will be taken every five (5) feet along the centerline of each tank and one sample every 15 feet along all appurtenant piping. Two (2) additional samples will be taken per tank and biased to the areas of highest field screened readings. Samples associated with the gasoline UST(s) will be analyzed for VO+10 and lead(if necessary). Samples associated with the diesel and/or oil UST(s) will be analyzed for TPHC. If any samples are higher than 1,000ppm then analyze 25% of the samples for VO+10.

ON-SITE MANAGER: Rob Naujelis **TELEPHONE:** (201)589-3714

OWNER: **TELEPHONE:**

EFFECTIVE DATE: Sept 15, 1992

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.

Michael S Kelly (for)

8428910498

KEVIN F. KRATINA, ACTING BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION -
BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS # C-92-3206 **UST #** 0226253

Reichhold Chemicals
46 Albert Ave.
Newark NJ

(Essex)

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et seq.:

Abandoment In Place Of: one 500 gallon V,M&P Naptha and one 500 gallon Mineral Spirits UST(s) and associated piping.

SITE ASSESSMENT: Three (3) soil samples will be taken from each tank and one (1) sample every 15 feet along all appurtenant piping. Samples will be analyzed for VO+10, Napthalene, and B/N+15.

Rob Naujelis — (201)589-3714

ON-SITE MANAGER: **TELEPHONE:**

OWNER: **TELEPHONE:**

Sept 15, 1992

EFFECTIVE DATE:

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.

Michael S Kelly (for)

8428910499

KEVIN F. KRATINA, ACTING BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

RECEIVED 9-30-92

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION
BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS # C-92-3205 **UST #** 0226253

Reichhold Chemicals
46 Albert Ave.
Newark NJ

(Essex)

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et seq.:

ABANDONMENT IN PLACE OF: one 3,000 gallon #2 Fuel/Heating Oil UST(s) and appurtenant piping.

SITE ASSESSMENT: "6" soil samples will be taken around the excavation and one(1) soil sample for every 15 feet of piping; samples will be analyzed for TPHC. If any results are higher than 1000 ppm then analyze 25% of the samples for VO+10.

ON-SITE MANAGER: Rob Naujelis **TELEPHONE:** (201) 589-3714

OWNER: **TELEPHONE:**

EFFECTIVE DATE:
Sept 15, 1992

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.

Michael S Kelly (for)

8428910500

KEVIN F. KRATINA, ACTING BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

6. For TRANSFER OF OWNERSHIP:

New Company Name _____

New Facility Name _____

Address _____

_____

New owner/operator (print) _____

Signature _____

7. For ABANDONMENT or REMOVAL:

a. Describe the proposed procedure in detail on an attached sheet. See Attached

b. Specify the product last stored in the tank: Fuel Oil No. 2

c. Date abandoned or removed ASAP

d. Is a Site Assessment Compliance Statement being completed? (YES) or NO Form MUST be completed and returned within 90 days of tank closure. (per 40 CFR 280.72)

8. For SUBSTANTIAL MODIFICATIONS:

a. Describe the reason for the modification and, in detail, the proposed procedure to be used on an attached sheet.

b. Specify the product presently stored in the tank: _____

c. Specify the product to be stored in the tank: _____

9. For NEW OR REPLACEMENT INSTALLATIONS:

a. Attach the specifications as required by the attached instructions.

b. Specify the product (s) to be stored in the tank: _____

E: All appropriate and applicable permis, licenses and certificates from any local, state and/or federal agency must be obtained separately from this notification as required by the above stated activity.

CERTIFICATION

**** This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for that facility. (7:14B-2.3 (a) 1). ****

"I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisionment."

Signature: _____

Name (print or type): Mikulas Gasparik

Title: Plant Manager Date: 7/31/90

- (12/87)

8428910501

Proposal No. 92-193

TANK CLOSURE PROCEDURES

Prepared for

REICHHOLD CHEMICALS, INC.
NEWARK, NEW JERSEY

Prepared by

VECTRE CORPORATION
P.O. Box 930
Lafayette, New Jersey 07848
(201) 383-2500

JUNE 5, 1992

TABLE OF CONTENTS

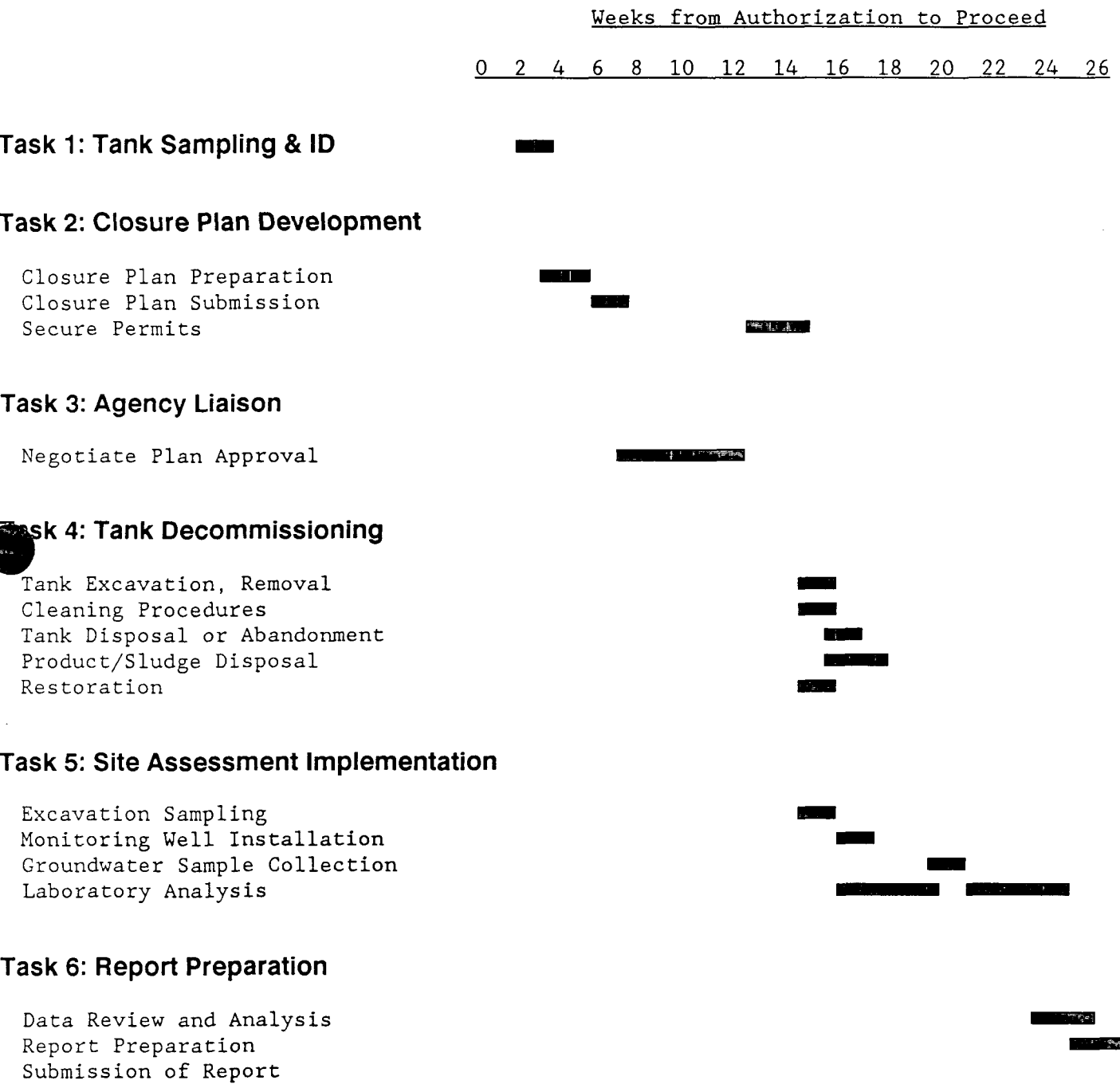
TANK SUMMARY

Reichhold Chemicals, Inc.
Newark, New Jersey

No. of Tanks	Tank Capacity	Tank Contents	Ground Cover
1 (Abandon)	3,000 gallons	#2 Fuel Oil	Asphalt
1 (Abandon)	500 gallons	Diesel Fuel	Concrete
1 (Abandon)	500 gallons	Napthalene	Concrete
1 (Abandon	500 gallons	Mineral spirits	Concrete
1 (Remove)	500 gallons	Gasoline	Gravel
1 (Remove)	500 gallons	To be determined	Gravel

(Please notify us of any discrepancies with the information identified above. Any modifications may reflect a change in the cost of our services.)

SCHEDULE OF TASKS



This schedule is not an exact representation of the actual days required, but is meant only to provide approximate time frames for completion.

1.0 Tank Sampling and Identification

Before the Closure Plans are prepared, the former contents of the "unknown" tank must be adequately determined. One sample will be collected from the aqueous phase product in the tank. We will hand dig to expose the tank top, but are assuming that this will be no more than three feet below grade. We will also measure the product level in the tank at this time.

The sample will be submitted to a NJDEP-certified laboratory. A Gas Chromatograph Fingerprint analysis, utilizing modified SW-846 8015 procedures, will be conducted. This is a qualitative analysis which will identify the type and general condition of a variety of petroleum products. If the analysis indicates that this is not a petroleum product, we will then request a Solvent Screen analysis which will identify various volatile compounds. The cost of this additional analysis, if necessary, is included as a Variable Charge. Our estimates for this task include providing 5-day turnaround for receipt of the analytical results.

2.0 Closure Plan Development

New Jersey Underground Storage Tank (UST) Regulations [N.J.A.C. 7:14B] require a Closure Plan be developed for each excavation area at a facility, and submitted for approval prior to implementation. Given the tank locations at your site, two individual Closure Plans must be developed and submitted.

Each Closure Plan submitted must include:

- A project implementation schedule;
- A site map of the facility, with all tank locations;
- A tank decommissioning plan, including proposed removal and disposal procedures for residual liquids, solids and sludges; and,
- A site assessment plan prepared by a qualified groundwater consultant, as defined in N.J.A.C. 7:14B-1.6.

Abandonment of the 3,000 gallon tank will also require submission of a justification for abandonment, certified by a New Jersey Professional Engineer. Vectre will provide the necessary documentation and certification in the Closure Plan.

Vectre Corporation professionals will complete the necessary State notification forms, and develop the Closure Plans for your site according to these requirements. We will require specific information and documentation for the facility, including copies of tank registration and MSDS forms, as well as descriptions of any previous environmental activities conducted (such as tank test results, soil/water sampling, etc.).

The completed submissions will be forwarded for review by you and your legal counsel, and subsequent signature and submission to the New Jersey Department of Environmental Protection and Energy (NJDEPE).

After we receive the necessary approvals, we will obtain the local demolition permit needed to implement the closure procedures at your site. To ensure proper documentation and recordkeeping, you will be requested to provide payment of required NJDEPE review fees and local permit fees.

3.0 Agency Liaison

The approval process may include requests for additional information, clarification, or possible negotiation of alternate requirements proposed by the Department. Discussions may be necessary regarding the number of monitoring well installations we intend to propose.

To assist you and expedite this process, we will provide liaison and negotiation services as necessary. The estimates for this task include approximately three hours of professional time for phone contact and correspondence. Such contact with the NJDEPE will be reviewed with you.

4.0 Tank Decommissioning Procedures

Based on previous experience and the NJDEPE Technical Guidance Document (September, 1990), we believe the following standard decommissioning procedures will be implemented. If new requirements are imposed by the approved Closure Plan, we will review any additional costs which may be incurred, and obtain your approval to proceed.

4.1 Project Initiation

We will notify you when the required approvals and permits are obtained. At that time the field operations phase of the project will be initiated, including project organization, planning and subcontractor scheduling.

4.2 Tank Excavation

The materials covering each tank will be excavated to expose the top of the tanks and associated piping. Based on your description, these estimated costs assume that the concrete is not reinforced, and less than 6" thick. Excavated materials will be staged on separate pieces of plastic sheeting in an area approved by you. The pipes will be cut, drained and capped. Tank removal and abandonment will be completed following implementation of the tank cleaning procedures.

4.3 Tank Cleaning

Flammable vapors will be purged as necessary to permit the tanks to be cut for entry. Vapor levels will be monitored to ensure they do not exceed approved limits. The tanks will then be cleaned in accordance with appropriate industry standards, including powerwashing of the tanks to be abandoned. Our costs for this task assume that the "mystery" tank will not present any unexpected complications. Adequate water and power supplies at the site are required for these procedures.

4.4 Tank Abandonment

The tanks will be filled to capacity with a concrete slurry mixture, to ensure that all voids are completely filled. At this time it does not appear that a concrete pumping vehicle will be required. This will be verified during prior on-site activities.

4.5 Transportation and Disposal

The tanks removed will be rendered useless, labelled and prepared for transportation and disposal to an approved scrap metal facility. Tank residues removed during the cleaning procedures will also be prepared for transportation and disposal. Disposal methods and costs vary based on the type, amount, and chemical properties of the materials within each tank. Bulk disposal will be utilized when feasible, and billed on a per-gallon basis. Current charges for bulk disposal are listed in the Variable Charges section. Minimum quantities of 500 gallons will apply.

Certain types of tank residues may require drum disposal, based on product incompatibility, the physical nature of the product, analytical characteristics, or the amount of material generated. Your project manager will inform you when the need for drum disposal is identified, and provide specific charges for the project. Generally, costs range between $150 to $350 per drum plus transportation.

4.6 Restoration

Prior to backfilling, the tank excavation will be lined with plastic. If no obvious contamination is detected, excavated soils will be returned to the excavation and covered with plastic. Up to 10 tons of clean fill will be provided to backfill to grade. If field survey or site assessment results indicate that the soil is contaminated, additional procedures may be required.

5.0 Site Assessment Implementation

All site assessment procedures specified in the approved Closure Plan will be implemented during this task. Based on previous experience and the NJDEPE Guidelines, we have proposed the following assessment procedures for this project. Due to the size and inaccessibility of the area, and the size of the tanks involved, we intend to propose the installation of two monitoring wells. It is, however, possible that the NJDEPE may impose additional requirements not included in this estimate.

5.1 Soil Sampling and Analysis

To assess soil conditions within each excavation, we will conduct recommended field testing screening procedures. If there is no evidence of contamination, a total of 22 discrete samples will be collected from the tank excavations, or through the bottom of the abandoned tanks. Sampling of piping runs does not appear to be required. Field and trip blanks will be submitted in accordance with required Quality Assurance/Quality Control (QA/QC) procedures.

The soil samples taken will be forwarded to a NJDEPE-certified laboratory for analysis of the following parameters, based on the former tank contents:

Contents	No. Samples	Parameter(s)
Fuel Oil	7	Total Petroleum Hydrocarbons (TPH)
Diesel Fuel	3	Total Petroleum Hydrocarbons (TPH)
Gasoline	3	Volatile Organics +15 w/ xylenes
Min. Spirits	3	Volatile Organics/Base Neutrals
Napthalene	3	Volatile Organics/Base Neutrals
Unknown	3	To be determined ($1,000 budgeted)

If the laboratory reports TPH levels of 1001 parts per million (ppm) or greater, additional analysis and/or remedial measures are required which are not included in the proposed scope of work. We will contact you regarding such actions, review the available alternatives, and obtain your approval to proceed.

If there is evidence of contamination, we will immediately notify your representative regarding potential reporting requirements. Our field supervisor will also discuss other actions that may be appropriate at that time, such as further soil excavation and sample collection. Any such additional activities are not included in this scope of work.

5.2 Monitoring Well Installation

We will supervise all monitoring well drilling and installation procedures required. Each well will be installed to intercept the water table and identify shallow groundwater contamination, following NJDEPE specifications for unconsolidated and/or bedrock monitoring wells. Split-spoon samples will be obtained, evaluated and recorded during these procedures. Soil boring logs will be maintained to document soil conditions observed.

The monitoring well designs and locations will be determined by subsurface conditions and water table depth encountered at the site. For estimating purposes, we have based these costs on the installation of up to two (2) wells, installed in unconsolidated materials to an approximate depth of up to 15 feet.

The wells will be installed by a licensed New Jersey well driller, as specified in N.J.A.C. 7:10-12.7, who will obtain the required permits. Off-site disposal of drill cuttings generated during these procedures is not included in the costs for this task. If off-site disposal is required for any reason, we will obtain your written authorization for these procedures prior to proceeding.

5.3 Groundwater Sampling & Analysis

The groundwater monitoring wells will be developed and sampled according to NJDEPE regulations and referenced procedure manuals [N.J.A.C. 7:14B-9.2(c)(5)]. As specified, the monitoring wells will not be sampled until two weeks after they have been installed and developed. Field and trip blanks will be obtained and analyzed following required Quality Assurance/Quality Control (QA/QC) procedures.

Two (2) groundwater and two (2) QA/QC samples will be collected and transported to an NJDEPE-certified laboratory for analysis. Based on NJDEPE guidelines, all samples will be analyzed for volatile organic compounds (EPA Method 624+15). One groundwater sample and the field blank will also be analyzed for base neutral compounds (EPA 625+15).

6.0 Closure Report Preparation

Within 90 days of completing the Closure Plan implementation, the following information must be submitted to the NJDEP:

- Scaled site diagrams which include sampling locations, tank locations, depth of tanks, stratigraphy and location of water table;
- Information regarding site conditions;
- Documentation of all tank decommissioning and site evaluation procedures;
- Site evaluation measurements, conclusions and recommendations;
- A summary of sampling results, keyed to the diagram; and,
- Certifications by the persons implementing the closure plan procedures, as well as the owner or operator.

After we have completed field operations and received the analytical results, Vectre professionals will compile and evaluate the necessary data, and prepare all required closure report submissions. After they have been finalized, these will be sent to you for review, and subsequent signature and submission to the Department.

REMUNERATION

To complete the scope of work as outlined above, we will bill you on a time and materials basis, with a budget estimate not to exceed $31,450 plus variable charges. The estimated cost associated with the project include:

Task Two - Tank Sampling and Identification

Analytical - GC Fingerprint for one (1) sample with 5-day turnaround	$ 150	
Professional Time - Exposing top of tank and collection of one product sample	$ 250	
Vehicle, Equipment & Expendables	$ 100	
Task 1 Total		$ 500

Task Two - Closure Plan Development/Submission

Professional time - Data compilation and review; preparation and submission of closure plans with P.E. certification; permit applications	$ 1,900	
Task 2 Total		$ 1,900

Task Three - Agency Liaison

Professional time - Liaison with agency to negotiate required approvals	$ 250	
Task 3 Total		$ 250

Task Four - Tank Decommissioning Procedures

Excavation, Removal & Restoration - One day for backhoe to excavate and remove tanks, and up to 10 tons fill to backfill excavation	$ 1,100	
Cleaning - Cleaning subcontractor to purge, clean and cut tanks	$ 6,100	
Transportation - Delivery of tanks to disposal facility	$ 275	
Abandonment - Up to 23 cubic yards concrete	$ 1,425	
Professional time - Project initiation and management, and on-site supervision of tank decommissioning procedures	$ 2,100	
Vehicles, Equipment & Expendables	$ 800	
Task 4 Total		$11,800

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REMUNERATION

To complete the scope of work as outlined above, we will bill you on a time and materials basis, with a budget estimate of up to $31,450 plus variable charges. The estimated cost associated with the project include:

Task Two - Tank Sampling and Identification

Analytical - GC Fingerprint for one (1) sample with 5-day turnaround	$ 150	
Professional Time - Exposing top of tank and collection of one product sample	$ 250	
Vehicle, Equipment & Expendables	$ 100	
Task 1 Total		$ 500

Task Two - Closure Plan Development/Submission

Professional time - Data compilation and review; preparation and submission of closure plans with P.E. certification; permit applications	$ 1,900	
Task 2 Total		$ 1,900

Task Three - Agency Liaison

Professional time - Liaison with agency to negotiate required approvals	$ 250	
Task 3 Total		$ 250

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Transportation - Delivery of tanks to disposal facility	$ 275	
Abandonment - Up to 23 cubic yards concrete	$ 1,425	
Professional time - Project initiation and management, and on-site supervision of tank decommissioning procedures	$ 2,100	
Vehicles, Equipment & Expendables	$ 800	
Task 4 Total		$11,800

Task Five - Site Assessment Procedures

Sample Analysis - Laboratory analysis of 22 soil, 2 groundwater samples & QA/QC for specified parameters	$ 9,700	
Drilling - One (1) day on site for drill rig and materials to install two (2) wells	$ 3,700	
Professional time - Investigation of excavation and soil sample collection; overseeing well installation procedures; groundwater sample collection; sample transfer and evaluation	$ 1,500	
Vehicles, Equipment & Expendables	$ 600	
Task 5 Total		$15,500

Task Six - Report Preparation

Professional time - Data review, analysis and interpretation; preparation and submission of two closure reports	$ 1,500	
Task 6 Total		$ 1,500
PROJECT TOTAL		$31,450

Variable charges:

Flammable liquids (gas/water):	$1.45-1.75 per gallon
Combustible liquids (oil/water):	$0.65-0.90 per gallon
Disposal of asphalt/concrete:	$500/load
Solvent Screen analysis	$225/sample

This time and materials cost estimate is based on the information you provided in our communications concerning the project, and our experience in similar projects. Although we believe that the amount represents an accurate assessment of the total costs to be incurred during this phase, our site investigation may reveal conditions that could require additional work. If at any time it appears that the project deliverables may differ from what we have anticipated and described in this proposal, we will promptly contact you regarding prospective changes or increases in cost, and obtain your approval before proceeding further. In the event additional work is indicated, we will submit to you our cost estimate, prepared in accordance with our Standard Schedule of Fees enclosed, and commence work upon receiving your approval.

PROPOSAL ACCEPTANCE

Please sign and date one copy of this proposal and return it in the envelope provided. The project is not deemed accepted by Vectre until all documents are received and approved at our Corporate offices in Lafayette, New Jersey.

This proposal, and all related documents, shall be interpreted under the laws of the State of New Jersey. The budget estimate provided is valid for thirty (30) days.

Michael Sylvester
Sales Executive

cc: Sales Administration Manager

ACCEPTANCE

Proposal #92-193

If the above scope of work, Corporate Policies, Terms and Conditions, Right of Entry, and Schedule of Fees for the implementation of this proposal meets with your approval, please indicate confirmation and acceptance by signing the copy of the proposal we have supplied, and returning it in the envelope provided.

_____ _____

Date Reichhold Chemicals, Inc.

Attachments: Right of Entry
Corporate Policies, Terms & Conditions
Schedule of Fees

VECTRE CORPORATION

RIGHT OF ENTRY

By acceptance of this proposal, the client hereby grants to Vectre Corporation, its agents, staff, consultants, contractors and subcontractors, if any, hereinafter referred to as "Vectre", and represents and warrants, even if the project location is not owned by client, that permission has been duly granted for a Right of Entry by Vectre, upon the project location (Site) as described in relevant contractual documents, for the purpose of performing and with the right to perform all acts, studies and all other necessary project work activities on behalf of Client including, but not limited to: the making of test borings; moving or removal of soil, water, materials and/or wastes; sampling; monitoring; analysis; installation of monitoring and/or recovery wells; placement or erection of required equipment, sheds, pits, pipes or other facilities; and other actions or procedures on Site pursuant to Work Statements, plans or procedures agreed by Client or required by cognizant agencies, regulations, laws, codes or good emergency preparedness/response practices.

Acceptance of this proposal constitutes agreement by client that Vectre will be held harmless in the event of damage or injury arising, relating to or resulting from subterranean structures, e.g., pipes, tanks, lines, cabling etc., on Site unless these have been called explicitly to the attention of Vectre and correctly shown and specified on plans furnished by Client in connection with work performed under relevant Agreement.

Client hereby recognizes that acts, studies, project work activities and/or use of exploration, transportation or construction equipment, if any, may unavoidably alter the terrain and affect vegetation in the work area and accepts that such damage, if it occurs, is inherent in the nature of the work and will hold Vectre harmless for any such damage.

VECTRE
CORPORATE POLICIES

ETHICS

Our responsibility is to our clients. Our goal is to assist them in complying with and, where possible, benefiting from the environmental regulations affecting their business area. We do endeavor to guide implementation of the most practical and inexpensive programs possible to achieve safety and compliance.

Concurrently, we have assumed the professional and social responsibility to meet the objectives of protecting human and environmental health, safety and integrity. Therefore, we do not assist in finding "loopholes" or developing avoidance procedures not in the spirit of said laws and responsibilities.

We deal only with subcontractors, suppliers and professionals as have been found to maintain similar high standards of integrity, capabilities and ethics. This protects both our clients and our own interests, and we are adamant in this regard.

CONFIDENTIALITY

The nature and scope of our services for any client are considered to be confidential. Any non-public information supplied by the client is kept as confidential until and unless a formal release is obtained.

Information to be supplied to outside agencies (e.g., reports, requests for exemptions, permits or registrations) will be, when requested, prepared by Vectre Corporation and then vetted, approved and submitted by the client and not Vectre Corporation.

In instances where Vectre Corporation may represent a client, either openly or on a nondisclosed (blind) basis, only information approved by the client will be presented, and the client assumes responsibility therefore in all instances and aspects.

In the event of termination of our services per any agreements in effect, such materials or information as particularly relate to the client will be promptly returned and/or destroyed.

ERRORS AND OMISSIONS

Please note our standard policies in implementing a program of this sort. There is always the possibility of missing, or not receiving, a detail that might otherwise affect the identification, procedures, policies or containment involved with any material. Although this is not usually the case, Vectre Corporation will depend exclusively on data and information supplied by your representatives in performing these services. However, please note our policy and understanding on errors and omissions - we cannot and do not assume responsibility for any acts or processes by your firm, its agents, employees, vendors, the site representatives or others, nor any errors or omissions that could take place. Acceptance of our proposal must be with this understanding.

TERMS AND CONDITIONS

Unless otherwise stated in the attached Scope of Work, Vectre's time and materials estimate is based on the following standard terms and conditions:

- Delays due to plant operations will not be experienced.
- Immediate and unrestricted site access will be provided to Vectre personnel, equipment, and subcontractors.
- No other conditions are discovered or encountered at the site that were not revealed during previous discussions or Vectre's visit to the site.
- Surface restoration (i.e., repaving or reseeding) will not be the responsibility of Vectre.
- Client will identify all underground utilities within or surrounding any required excavation area, and disconnect any electrical lines associated with the tanks, lines or pumps.
- The client will obtain all necessary local permits, and submit all notifibmit all notifications to the State agency which may be required.
- Contaminated soil, groundwater or other obstacles are not encountered during excavation.
- No sheeting, shoring or dewatering will be required.
- The client will be prepared to supply EPA ID Number and signed profile sheets, where required.

If requested, Vectre will be happy to assist the client with the preparation of local, State or Federal notification, registration, or application forms required, as well as provide liaison services with State or local officials. These services will be billed on a time and materials basis in addition to the cost estimate provided herein.

Client may postpone testing without charge provided that notification of such postponement is received by Vectre no later than forty-eight (48) hours prior to scheduled date of test. Vectre will endeavor to notify client, when possible, twenty-four (24) hours prior to scheduled test date, in the event of postponement or delay of the test by Vectre.

In the unfortunate event that delays are encountered in performing the proposed tasks due to conditions existing or arising on-site, and beyond the control of Vectre (for example, but not limited to, insufficient product in the tank or on hand, vapor locks within the tank, improper size fill pipe, leaking fitting observed during the test requiring repair, other preparative work not completed, or interruptions or delays imposed by the client) waiting time will be billed in accordance with Vectre's published fee schedule, attached.

TERMS AND CONDITIONS (continued)

Although we believe that the above is a reasonable estimate for the cost to be incurred, our site investigation may reveal conditions that require additional work or costs. If at any time it appears that time or other budget estimates may be exceeded, or that project deliverables may be different than currently anticipated, Vectre will promptly notify the client explain any changes or estimated increase in cost, and will obtain your approval before proceeding further. All work on this project will be billed according to Vectre's Standard Schedule of Fees dated August 15, 1991, attached.

If any inspections, meetings or other demands imposed by local or state agencies cause unexpected delays, additional costs may be incurred, which will be passed on in accordance with the policies expressed herein.

Please note that Vectre makes no guarantees regarding the operation of any tank system or appurtenances. The client will be given any applicable manufacturer's specifications and/or warrantees and will hold Vectre harmless from any guarantees regarding the tank system and appurtenances.

As part of this project, Vectre may provide assistance to the client in identifying potential waste management contractors and in coordinating with such contractors for acceptance of client's waste. Vectre does not, in the course of providing its services, become a Generator, Storer, Transporter, Treater, or TSDF of client's soil, sludge or other waste material of any type. Client is responsible for the selection of Transporters and TSDFs and for all waste generators' and shippers' responsibilities. At all times, title to all soils and all other waste material shall remain with the client, Transporter, or TSDF at the client's discretion.

If a tank is found to be leaking, or the soil to be contaminated, it will be the responsibility of the client to make proper notifications to authorities, in compliance with applicable statutory or regulatory requirements. Vectre is held harmless by client for any costs, fines or other liabilities that could otherwise result from failure to notify.

The client may be required by Federal, State, or local regulation or statute to notify agencies prior to performing a tank test and also to report the results of the precision tests performed by Vectre under this agreement. It is agreed that the client shall be responsible for all such reporting and shall hold harmless and indemnify Vectre from any and all fines, penalties, assessments and costs resulting from any failure of the client to make such report.

All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and all other documents we prepare, as instruments or products of our service, are, and shall remain, our property. The client agrees that all reports, documents, and all other work furnished to the client, or his agents, which is not paid for, will be returned upon our demand and will not be used, by the client, for any purpose whatsoever. We will retain pertinent records relating to the services performed for a period of five (5) years following submission of the report. During this period copies of the records will be made available to the client at reasonable times and at reasonable costs.

PAYMENT SCHEDULE

Unless otherwise stated in this proposal, invoicing will be on a monthly basis. Payments received later than 30 days after the date on the invoice may be subject to a 1-1/2% service charge prorated on a 30 day month. In the event that legal services are required to effect collection, the client will pay for reasonable attorney's fees and costs. We reserve the right to cease operations at any stage of the project, and to withhold any and all information and data relevant to the project, if payment for past and current services is more than 45 days overdue.

CONFIDENTIAL

SCHEDULE OF FEES

AS OF AUGUST 15, 1991

PERSONNEL

Principal/Corporate Manager	$125.00/hr
Senior Manager	$ 85.00/hr
Project Manager	$ 75.00/hr
Senior Professional	$ 68.00/hr
Project Professional	$ 63.00/hr
Staff Professional	$ 56.00/hr
Senior Technician	$ 50.00/hr
Technician	$ 45.00/hr
Technical Labor	$ 40.00/hr
Expert Testimony	$175.00/hr
Word Processing	$ 32.00/hr
Drafting & Graphics	$ 35.00/hr
Premium Charge Rates:	
Saturday Work	35% Premium on all Charges
Sunday or Holiday Work	50% Premium on all Charges
Rush Work	50% Premium on all Charges

EQUIPMENT AND SERVICES

Radio-Tracing Instrumentation	$ 80.00/day
Magnatometer	$ 60.00/day
Explosometer	$ 60.00/day
Submersible Pump 10 gpm	$ 60.00/day
Datalogger	$350.00/day, $1000/week
Pressure Transducers	$ 50.00/day/ea, $175/week/ea
Photoionization Detector (PID)	$ 90.00/day
Generator	$ 80.00/day
Pipes & Cable Locator	$ 60.00/day
Explosimeter	$ 60.00/day
Submersible Pump 10 gpm	$ 60.00/day
Submersible Pump 100 gpm	$125.00/day
Centrifugal Pump	$ 25.00/day
Miscellaneous Sampling Equipment	$ 35.00/day $5.00/day/ea
pH Meter	$ 25.00/day
Conductivity Meter	$ 20.00/day
Bailers (Teflon & Stainless Steel)	$ 20.00/day/bailer
Depth to Water Meter	$ 25.00/day
Hand Auger	$ 10.00/day
Tool Box	$ 10.00/day
Portable Eye Shower	$ 25.00/day
PCB Kits	$ 15.00/ea

EQUIPMENT AND SUPPLIES, continued

Disposable Gloves	$ 1.00/pr
Reusable Gloves	$ 3.00/pr
Wizzard Gloves	$ 15.50/pr
Rubber Boots	$ 5.00/pr
Disposable Coveralls	$ 8.00/pr
Distilled Water	$ 1.50/gal
Methanol	$ 4.00/qt
Hexane	$ 2.00/qt
Oil	$ 2.00/qt
Gasoline	$ 2.00/gal
Dustproof Goggles	$ 6.00/ea
Respirators	$ 10.00/day
Respirator Cartridges	$ 13.00/ea
Miscellaneous (cleaning, equipment packing, etc.)	$ 10.00/day
Camera	$ 10.00/day
Other Supplies	Cost + 10%
Laboratory & Drilling Services (Subcontracted)	Cost + 15%
Specialized Equipment/Instrumentation	Quoted As Necessary
Trades (Electrical, Plumbing, Mechanical & Construction)	Subcontracted At Cost + 15%
Computer Search Time	$ 42.00/hr
Computer Print Time	$ .14/page
Copies	$ .10/imprint
Facsimile	$ 1.00/page
Postage & Shipping	Cost + 10%
Breathing Air	Quoted Per Occurrence
Air-stripping Column	Quoted Per Occurrence
Storage Tank	Quoted Per Occurrence
Hydrocarbon Skimming System	Quoted Per Occurrence
Chemical Transfer Pumps	Quoted Per Occurrence
Scaffolding	Quoted Per Occurrence

Out of pocket expenses are invoiced at cost +10%, documented where practicable.
Travel, at commercial rates, using corporate discounts where available.

STANDARD FEE SCHEDULE

LABORATORY ANALYSIS

4/6/92

Analytical Parameter	Lab Method	Cost per Sample
Acid Extractables +10	625/8250+10	325.00
Base Neutrals +15	625/8250+15	350.00
BTEX	602/8020	100.00
Chromium	218.1/7190	30.00
Corrosivity	9045	30.00
Cyanide (Total)	9012	40.00
Ignitability	1010	45.00
Lead	239.2/7421	40.00
N.J. Hazardous Waste (ID27)	Multiple Methods	725.00
N.J. ID27 w/ Pesticides & Herbicides	Multiple Methods	1100.00
Ohio Hazardous Waste	Multiple Methods	860.00
pH	150.1/9045	30.00**
PCBs	608/8080	180.00
Paint Filter Test	604/8040	30.00
Pesticides	608/8080	150.00
Phenols (Total)	604/8040	50.00
Priority Pollutant Metals	Multiple Methods	270.00
Priority Pollutant Compounds +40	Multiple Methods	1400.00
Polycyclical Aromatic Hydrocarbons	Multiple Methods	375.00
Reactivity (Total)		90.00
Semivolatiles (BN+AE) - no search	625/8250	575.00
Semivolatiles + 25	625/8250 + 25	650.00
TCLP Zero Headspace Extraction		130.00
TCLP Extraction	1311	150.00
TCLP Metals (8)	3005/7000	225.00
TCLP Volatiles	5030/8240	250.00
TCLP Semivolatiles	8270	625.00
TCLP Pesticide/Herbicide	8270/8150	325.00
TCLP Full Package	Multiple Methods	1600.00
Total Oxygenated Halogens (TOX)	9020	155.00**
Total Petroleum Hydrocarbons (TPH)	418.1	65.00
TPH w/ Quick Turnaround	418.1	75.00
Volatile Organics	624/8240	250.00
Volatile Organics +15 w/ Xylenes	624/8240+15	300.00
Volatile Organics +15 w/Xylene, MTBE, TBA	624/8240+15	350.00

Sample Shipment:	Included
Turnaround Time:	Standard (3-4 weeks) except TPH as noted
Data Package:	Tier II Deliverables

Regulatory Format deliverables include additional quality assurance/quality control documentation required by many State and Federal agencies for verification of analytical procedures and results. This additional data includes such information as quality assurance forms; sample chromatograms and mass spectra; calibrations; lab chronicles; chain of custody; and methodology summaries.

If rapid turnaround for receipt of results is required, the laboratory may require a 50-100% premium for this service (except for TPH as noted above).

* Frequently requested parameters are listed. Others quoted as necessary.

** Prices applicable to water samples only.

8428910521

CERTIFICATE OF INSURANCE

12/31/91

PRODUCER
COUNTRY INSURANCE ASSOCIATES

Route 23, P.O. Box 705
Sussex, NJ
[redacted]461
PHONE 201-875-3111

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED

Vectre Corp.
P. O. Drawer 700
Lafayette, NJ
07848

COMPANIES AFFORDING COVERAGE

COMPANY LETTER A	National Indemnity Insurance
COMPANY LETTER B	Selective Insurance Company
COMPANY LETTER C	RLI Insurance Comapny
COMPANY LETTER D	American Reliance
COMPANY LETTER E	United National Insurance

> COVERAGES <

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFF DATE	POLICY EXP DATE	LIABILITY LIMITS IN THOUSANDS	EACH OCC	AGGREGATE
A	GENERAL LIABILITY [ ] COMPREHENSIVE FORM [X] PREMISES/OPERATIONS [ ] UNDERGROUND EXPLOSION & COLLAPSE HAZARD [ ] PRODUCTS/COMPLETED OPER [ ] CONTRACTUAL [ ] INDEPENDENT CONTRACTORS [ ] BROAD FORM PROPERTY DAMAGE [X] PERSONAL INJURY [ ]	GLA286787	08/29/91	08/29/92	BODILY INJURY PROPERTY DAMAGE BI & PD COMBINED PERSONAL INJURY	1000	2000 1000
	AUTOMOBILE LIAB [X] ANY AUTO [X] ALL OWNED AUTOS(PRIV PASS) [X] ALL OWNED AUTOS(OTHER THAN PRIV PASS) [X] HIRED AUTOS [X] NON-OWNED AUTOS [ ] GARAGE LIABILITY [ ]	S1239989	10/15/91	10/15/92	BODILY INJURY (PER PERS) BODILY INJURY (PER ACC) PROPERTY DAMAGE BI & PD COMBINED	1000	
E	EXCESS LIABILITY [X] UMBRELLA FORM [ ] OTHER THAN UMBRELLA FORM	CU23990	07/27/91	08/29/92	BI & PD COMBINED	1000	1000
D	WORKERS' COMP AND	WC2916277	07/23/91	07/23/92	STATUTORY		
D	EMPLOYERS' LIAB				100 500 100	EACH ACC DISEASE-POLICY LIMIT DISEASE-EACH EMPLOYEE	
	OTHER						

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

> CERTIFICATE HOLDER <

8428910522

> CANCELLATION <

= SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

= AUTHORIZED REPRESENTATIVE

INSURANCE BINDER

3/31/92

THIS BINDER IS A TEMPORARY INSURANCE CONTRACT, SUBJECT TO THE CONDITIONS SHOWN ON THE REVERSE SIDE OF THIS FORM.

PRODUCER

[redacted] Insurance Group
[redacted] Mt. Kemble Av.
Morristown, NJ 07960

CODE: 141-55080 SUB-CODE:

INSURED

Vectre Corporation
P.O. Box 930
Lafayette NJ 07848

COMPANY: Home Insurance Co.

BINDER NO.: BIND022923

DATE EFFECTIVE	TIME		DATE EXPIRATION	TIME	
4/01/92	12 01 AM		6/01/92	12-01 AM	X
	PM			NOON	

☐ THIS BINDER IS ISSUED TO EXTEND COVERAGE IN THE ABOVE NAMED COMPANY PER EXPIRING POLICY NO.:

DESCRIPTION OF OPERATIONS/VEHICLES/PROPERTY(INCLUDING LOCATION)

COVERAGES

ALL LIABILITY LIMITS IN THOUSANDS

TYPE OF INSURANCE	COVERAGES/FORMS	AMOUNT	DEDUCTIBLE	COINSURANCE
PROPERTY — CAUSES OF LOSS: ☐ BASIC ☐ BROAD ☐ SPECIAL				
GENERAL LIABILITY		GENERAL AGGREGATE		
☐ COMMERCIAL GEN. LIABILITY		PROD.-COMP/OPS AGGREGATE		
☐ CLAIMS MADE ☐ OCCUR.		PERSONAL & ADVTSNG. INJURY		
☐ OWNER'S & CONTRACTOR'S PROT.		EACH OCCURRENCE		
	RETRO DATE FOR CLAIMS MADE:	FIRE DAMAGE(ANY ONE FIRE)		
		MED.EXPENSE(ANY ONE PERS.)		
AUTOMOBILE LIABILITY	☐ ALL VEHICLES ☐ SCHEDULED VEHICLES	CSL		
☐ NON/OWNED		BI PERS/ACCID		
☐ HIRED		PD		
☐ GARAGE		MED. PAY		
		PIP		
		UM		
AUTO PHYSICAL DAMAGE	☐ ALL VEHICLES ☐ SCHEDULED VEHICLES	☐ ACV		
☐ COLLISION DED:		☐ STATED AMOUNT		
☐ OTC DED:		☐ OTHER		
EXCESS LIABILITY		EACH OCCURRENCE	AGGREGATE	SELF-INSURED RETENTION
☐ UMBRELLA FORM				
☐ OTHER THAN UMBRELLA FORM	RETRO DATE FOR CLAIMS MADE:			
WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY		STATUTORY		
		(EACH ACCIDENT)		
		(DISEASE POLICY LIMIT)		
		(DISEASE-EACH EMPLOYEE)		

SPECIAL CONDITIONS/RESTRICTIONS/OTHER COVERAGES

PROFESSIONAL ERRORS AND OMISSIONS $1,000,000 LIMIT $10,000 DED.
INCLUDING POLLUTION LIMIT $1,000,000 $10,000 DED.

NAME & ADDRESS

[redacted]

☐ MORTGAGEE ☐ ADDITIONAL INSURED
☐ LOSS PAYEE

LOAN #

AUTHORIZED REPRESENTATIVE: Kevin O'Conbay

AC 75-S (2/88) 20-41

8428910523

STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

Certifies That

Vectre Corporation
Corner of Rt. 15 & County Road 623
Lafayette, NJ 07848-0930

having duly met the requirements of the

Underground Storage Tank Certification Program
N.J.S.A. 58:10A-24.1-8

is hereby approved to perform the following services:

Installation - Entire UST System
Closure
Tank Testing
Subsurface Evaluation
Corrosion Specialist

1900116
PERMANENT CERTIFICATION NUMBER

3/31/95
EXPIRATION DATE

COMMISSIONER, DEPARTMENT OF
ENVIRONMENTAL PROTECTION AND ENERGY

TO BE CONSPICUOUSLY DISPLAYED AT THE FACILITY.

8428910524